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ABSTRACT

This report uses data from the 1993 National Study of Postsecondary Faculty (NSOPF-93) to compare full-time faculty who, in the fall of 1992, were in the first 7 years of their academic career with full-time faculty with 8 or more years of full-time college experience. Among key findings are the following: the new cohort disproportionately represented fields outside the liberal arts; females constituted 41 percent of the new faculty and 28 percent of the senior cohort; racial/ethnic minorities constituted 17 percent of the new cohort and 12 percent of the senior cohort; new faculty did not assume their current positions until an average of 6 years after earning their highest degree, as compared to 2 to 3 years for senior faculty; and 33 percent of the new cohort were in nontenure-eligible positions, as compared to 16 percent of the senior faculty. Individual sections of the report present tables, graphs, and text that address the following: (1) identifying new entrants to full-time faculty; (2) size and distribution of new entrants by institutional type and program area; (3) demographic characteristics of new entrants; (4) educational background and work history of new entrants; and (5) appointment characteristics and satisfaction levels of new entrants. Appended are technical notes and standard error tables. (DB)

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Statistical Analysis Report October 1998

1993 National Study of Postsecondary Faculty (NSOPF-93)

New Entrants to the Full-Time Faculty of Higher Education Institutions

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Statistical Analysis Report October 1998

1993 National Study of Postsecondary Faculty (NSOPF-93)

New Entrants to the Full-Time Faculty of Higher Education Institutions

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Foreword

This report is one of many publications released from the 1993 National Study of Postsecondary Faculty (NSOPF-93) by the National Center for Education Statistics. NCES is pleased to sponsor analysis of the condition of faculty in higher education institutions. We hope the information in this report will be of interest to the research community and will stimulate discussions on faculty issues.

NCES has plans to publish several additional reports from NSOPF-93, since the next new data on faculty will not be available until 2000 when the results from the 1999 National Study of Postsecondary Faculty will become available. We encourage individuals to keep track of our publications through the internet at http://nces.ed.gov and through our announcements to the higher education community.

Finally, researchers are strongly encouraged to conduct their own in-depth analysis of the NSOPF data.

Paul D. Planchon
Associate Commissioner
Surveys and Cooperative Systems Group

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Director
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Highlights

The following findings are based on comparisons of full-time faculty who in the Fall of 1992 were in the first seven years of their academic career (the terms, the new academic generation cohort, new entrants, new cohort, or new faculty are used interchangeably in this report to designate these faculty) with full-time faculty who in the Fall of 1992 had eight or more years of full-time college experience (the senior cohort or senior faculty). The findings are from the 1993 National Study of Postsecondary Faculty (NSOPF-93). Faculty described in this report represent a subgroup of faculty and instructional staff included in NSOPF-93, namely those full-time faculty whose principal activity during the Fall of 1992 was teaching, research, or administration (at the level of program director, department chairperson, or dean). The remainder of this section highlights key findings from the report.

Cohort Size and Distribution

- About 172,000 full-time faculty were in the first seven years of an academic career, constituting one-third of the entire full-time faculty (table 2.1).
- The new cohort disproportionately represented fields outside the liberal arts: 51 percent of the new cohort and only 45 percent of the senior cohort had their programmatic home outside the humanities, the social and natural sciences, and the fine arts fields (table 2.2).

Demographic Characteristics

- Females constituted 41 percent of the new faculty, 28 percent of the senior cohort, and 33 percent of the full-time faculty overall (table 3.2).
- Racial/ethnic minorities constituted one-sixth (17 percent) of the new cohort, one-ninth of the senior cohort (12 percent), and 13 percent of the full-time faculty overall (table 3.3).
- Faculty who are not native born U.S citizens constituted one-sixth (17 percent) of the new cohort (25 percent in the natural sciences), one-ninth (12 percent) of the senior cohort (14 percent in the natural sciences), and 13 percent of the full-time faculty overall (table 3.5).

Educational Background and Work History

- New faculty, like senior faculty, earned their highest degree in their early thirties (31-32), but did not assume their current position, on average, until six years later compared to 2-3 years later for the senior faculty (table 4.2).
- New faculty were more likely than senior faculty to have had prior work experience and indeed work experience outside academe prior to assuming the position they held in the Fall of 1992 (tables 4.3–4.5).

Types of Appointment and Job/Career Satisfaction

- One-third (33 percent) of the new cohort were in non-tenure eligible positions as compared to one-sixth of the senior faculty (16 percent), and females among new cohort faculty were more likely than males to hold such non-tenure earning appointments (40 versus 28 percent, respectively) (table 5.2).

- New faculty were more likely to be dissatisfied with their job security and their prospects for advancement than senior faculty, but five out of six of both new and senior cohorts were satisfied with their careers overall (tables 5.3 and 5.4).

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Section 1: Identifying the New Entrants to the Full-time Faculty

Powerful pressures are already at work that will reshape American higher education over the next several decades (Kerr 1994, Kennedy 1995). Among those forces most frequently cited are the demographic shifts that will promote an increasing focus on multiculturalism; technological developments that will assuredly revolutionize instruction and scholarly communication; and economic constraints that will require increased emphases on productivity improvements and cost savings.

Less frequently discussed are the characteristics and orientation of the faculty members who will be on the front lines—and who will determine on a daily basis how well the system adapts to new realities. Starting in the mid 1950s, many thousands of faculty members, often without doctoral degrees, were hired to staff the rapid expansion of higher education (Cartter, 1976). By the late 1960s, however, a new cohort of faculty, more research-oriented than their predecessors, began to replace them. It is these "teacher-scholars" who have largely reshaped our current system in the image of their own collective career aspirations and values (Jencks and Riesman, 1968). Now a new academic generation is beginning to emerge as their successors, a product of different pressures and priorities. In some respects they can expect to be less influential in the face of powerfully determinative demographic, economic, and technological forces that are transforming higher education. And yet, despite the environmental constraints, this cohort of recent hires, in view of its large size, is certain to play an influential, long-term role in how our national higher education system evolves. Accordingly, if we understand who these new faculty members are and what values they bring to their classrooms and laboratories, we will have provided an important lens through which to view higher education's future path.

This report provides at least partial answers to a host of questions about the future faculty: What is known about this new academic generation? Who are they? Where do they come from? What are the orientations, values, and experiences that they bring to their work? And, central to the present inquiry, how do they compare to that dominant earlier cohort that molded higher education for two decades and whose influence still dominates? Is a "new breed" emerging—a cohort whose characteristics, both demographic and attitudinal, clearly distinguish them from their predecessors? And, if that is the case, are those changes so pronounced that the new cohort can be expected, despite the limitations imposed by the environment, to infuse higher education with different values and directions? To a considerable degree, the future of the academic profession and the outlook for the American academy itself hinges on the answers to these questions.

The 1993 National Study of Postsecondary Faculty (NSOPF-93) permits the delineation of this new academic generation—which is defined as the cohort of full-time faculty members in the first seven years of their academic careers (the terms, the new academic generation cohort, new entrants, new cohort, or new faculty are used interchangeably in this report to depict these faculty)—and to examine how this subgroup of faculty compares to a more senior cohort of full-time faculty on a wide variety of demographic and career variables.[1]

Scope of Inquiry

The following sections describe the methods employed to identify this new academic generation and various comparison groups within the more senior cohort. Following a description of the basic profile of the new academic generation (their size and institutional venues in relation to more senior faculty), comparisons also are drawn along the following dimensions:

- Demographic characteristics, including age, gender, race/ethnicity, and citizenship status;
- Educational and work history, including highest degree earned and previous employment; and
- Current job characteristics, including rank, tenure status, and job/career satisfaction.

Whenever instructive, comparisons are undertaken with appropriate controls that permit breakouts by institutional type, academic program area, and various aspects of the respondent's career stage and background. All results reported are significant at the .05 level.[2] Finally, drawing from these data, conclusions and possible implications for the future of higher education are discussed.

Defining the New Entrants

Based on the variables included in the NSOPF-93 faculty survey instrument, four criteria were selected to define membership in the subgroup of new entrants:

- Academic status: having faculty status;
- Employment status: full-time (as distinguished from part-time);
- Principal activity: teaching, research, or administration (at the level of program director, department chair, or dean) during Fall 1992;[3] and
- Duration of faculty experience: seven years or less in a full-time faculty position (including current appointment and any previous academic employment).

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[1] The *Technical Notes* provide a description of the NSOPF-93 survey, sampling design, sources of error and weighting procedures.

[2] In accordance with NCES standards, the Bonferroni adjustment to the significance level was used when multiple comparisons were made. With this adjustment, the .05 significance level was divided by the total number of comparisons made. Consequently, the t-value required for statistical significance among the multiple comparisons is considerably more rigorous than the 1.96 t-value required for a single comparison. See the *Technical Notes* for a description of accuracy of estimates.

[3] This excludes those individuals who may have faculty status at their institution (and may actually teach), but whose principal job responsibilities are not classroom instruction, including , for example, counselors, librarians, senior administrators, and clinical faculty in the health related fields who are primarily clinicians. Other NCES reports from NSOPF may have different inclusion criteria. It is important that the reader recognize what subgroup of faculty and instructional staff are included in any particular NSOPF report.

For purposes of this report, current part-time faculty members were excluded. This meant bypassing a very sizable[4] —and very important—segment of the contemporary faculty. However, the thrust of our inquiry focused on the changing characteristics of the traditional full-time faculty and, accordingly, the part-timers, despite their growing presence in the conduct of postsecondary education, were excluded from this analysis. Basic to this analysis was the decision to select into the new entrant cohort only those full-time faculty whose full-time faculty experience was less than seven years. That is, full-time faculty members were excluded from the new entrants cohort (and placed in the residual senior faculty cohort) if they already had accumulated more than seven years of full-time faculty experience at one or more higher education institutions. In this fashion, full-time faculty who were relatively new to their current institution but had eight or more years of full-time faculty experience in higher education were included in the senior cohort. As a cutoff point, seven—as well as any other number, for that matter—is an arbitrary choice. It was chosen because persons hired as recently as 1986 were, as of the Fall of 1992, still relatively young in their careers. Conversely, more than seven years would undesirably increase the proportion of that cohort that was becoming well established, that is, already attaining promotions and tenure. Thus seven years seemed a better breakpoint than any other number of years.

A similar set of criteria was used to define an appropriate comparison group of senior faculty: having faculty status; being employed full time; and having teaching, research or administration (at the level of program director, department chair or dean) as one's principal activity. The one difference: for inclusion in the senior cohort, the number of cumulative years in full-time faculty positions, including current and previous positions, needed to be greater than seven. And so, our analysis compared faculty cohorts whose basic status was essentially the same except for seniority.

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[4] It is estimated that 435,735 faculty and instructional staff were employed part time in the Fall of 1992 (NSOPF-93 unpublished data). NCES plans to release a report on part-time instructional faculty and staff in the near future.

Section 2: Size and Distribution of the New Entrants by Institutional Type and Program Area

Size of the New Cohort

Based on our selection criteria, the new entrant cohort in the Fall of 1992 numbered 172,319 full-time faculty.[5] This compares to 342,657 full-time faculty in the senior cohort, or almost precisely twice as many as the new entry faculty. Put another way, these new entrants constituted one-third (33.5 percent) of the 514,976 total full-time faculty that met our four selection criteria.[6] Thus, a very sizable infusion of "new blood" was apparent. This will strike some observers as surprising, for the recent past is widely perceived to be a static rather than a dynamic period of time in the academic marketplace; it has been commonplace, probably verging on a near consensus, to think of higher education as being gripped by market conditions that have forestalled significant numbers of new entrants. The facts, however, showed a substantial stream, no mere trickle, of new faces—and, as detailed below, a cohort of faculty members who were much more diverse than their predecessors.

Distribution by Institutional Type

As table 2.1 shows, much of the recent hiring has been at research universities (29.5 percent of all new cohort faculty), with new entrants accounting for 41.4 percent of the faculties at the *private* research universities.[7] Doctorate-granting institutions not classified as "research universities" accounted for 15.3 percent of the new entrants, while comprehensive universities accounted for another 23.2 percent, liberal arts colleges for only 7.4 percent, and public 2-year colleges for 19.3 percent.

Distribution by Program Area

Viewed by program area (table 2.2), the data show that new faculty were less likely to have their academic homes in the traditional arts and sciences than their senior colleagues. Conversely, they were more likely to have their academic homes in the professions. Forty-nine percent of the new cohort (versus 55.1 percent of the senior cohort) were teaching in the fine arts, the humanities, or the natural or social sciences – and that difference was largely accounted for by the smaller percentage of new faculty in the humanities and the fine arts. The increased prominence of the professions was partly accounted for by the larger contingent of new faculty in the health sciences.

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[5] Of the new entrant faculty, 33 percent had one to two years full-time experience, 43 percent had three to five years full-time experience, and 24 percent had six or seven years full-time experience.

[6] Applying the selection criteria described above, the total number of full-time faculty in this analysis was 514,976. This constitutes 86.1 percent of the 598,231 full-time faculty and instructional staff reported as full-time faculty and instructional staff in the NSOPF-93 faculty survey. Excluded, therefore, are 83,255 full-time individuals whose principal responsibilities differed from those of teaching, research, or administration. The largest segment, about one-third of this excluded group, are individuals who reported clinical service as their primary activity and who teach in health related programs.

[7] For the NSOPF-93 faculty survey, institutions were coded according to a modified Carnegie classification scheme (Carnegie Foundation, 1994). See the *Technical Notes* for a description of the various categories.

The significant developments here were twofold: first, the decline in the liberal arts' share, for the liberal arts faculty constituted more than one-half (55.1 percent) of the senior cohort; second, the increase in the professional fields, especially the health sciences, which claimed about one-sixth of the new cohort as compared to one-eighth of the senior cohort.

Table 2.1—Percentage distribution of full-time faculty, by faculty seniority and type and control of institution: Fall 1992

Type and control of institution	All faculty[1]		New faculty[2]		Senior faculty[2]		New faculty as percent of all faculty
	Number	Percent	Number	Percent	Number	Percent	
All institutions	514,976	100.0	172,319	100.0	342,657	100.0	33.5
All research institutions	141,593	27.5	50,867	29.5	90,727	26.5	35.9
Public	108,309	21.0	37,085	21.5	71,224	20.8	34.2
Private	33,284	6.5	13,782	8.0	19,502	5.7	41.4
All other doctorate-granting institutions[3]	76,207	14.8	26,361	15.3	49,845	14.6	34.6
Public	50,581	9.8	17,028	9.9	33,553	9.8	33.7
Private	25,626	5.0	9,333	5.4	16,293	4.8	36.4
All comprehensive institutions	131,418	25.5	39,929	23.2	91,490	26.7	30.4
Public	93,877	18.2	28,017	16.3	65,860	19.2	29.8
Private	37,541	7.3	11,912	6.9	25,630	7.5	31.7
Private liberal arts institutions	37,426	7.3	12,662	7.4	24,764	7.2	33.8
Public 2-year institutions	103,529	20.1	33,283	19.3	70,246	20.5	32.2
All other institutions[4]	24,803	4.8	9,217	5.4	15,586	4.6	37.2

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 2.2—Percentage distribution of full-time faculty, by faculty seniority and program area: Fall 1992

Program area	All faculty[1]		New faculty[2]		Senior faculty[2]		New faculty as percent of all faculty
	Number	Percent	Number	Percent	Number	Percent	
All program areas[3]	503,141	100.0	166,045	100.0	337,096	100.0	33.0
Professions	165,382	32.9	59,966	36.1	105,416	31.3	36.3
Business	39,442	7.8	13,293	8.0	26,149	7.8	33.7
Education	35,152	7.0	11,326	6.8	23,826	7.1	32.2
Engineering	25,116	5.0	9,278	5.6	15,838	4.7	36.9
Health Sciences	65,673	13.1	26,069	15.7	39,604	11.8	39.7
Liberal arts and sciences	266,944	53.1	81,297	49.0	185,647	55.1	30.5
Fine arts	31,045	6.2	8,394	5.1	22,651	6.7	27.0
Humanities	74,779	14.9	21,504	13.0	53,275	15.8	28.8
Natural sciences	103,382	20.6	33,141	20.0	70,241	20.8	32.1
Social sciences	57,738	11.5	18,258	11.0	39,480	11.7	31.6
All other program areas	70,815	14.1	24,782	14.9	46,033	13.7	35.0

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Section 3: Demographic Characteristics of the New Entrants

Who are the new faculty and how do they compare to the senior faculty? Based on the NSOPF-93 faculty survey, the variables of age, gender, race/ethnicity, and citizenship status were examined.

Age

The cohort of new entrants is, naturally, much younger than their more experienced counterparts (table 3.1). Almost one-half (44.9 percent) were between 35 and 44 compared to 21 percent of the senior faculty. They are not, however, a youthful lot. Their mean age was 42—about nine years younger than the senior faculty whose average age was 51.

Gender

Women have made very substantial gains in obtaining faculty positions (table 3.2). While they constituted almost one-third (32.7 percent) of all faculty and 28.5 percent of the senior faculty, they constituted 41 percent of the new faculty. Indeed, so many women have entered the academic workforce during this relatively brief period that the new cohort of women now constituted 41.8 percent of all full-time female faculty. Remember, the new cohort of faculty (males and females) constituted 33.5 percent of all full-time faculty (table 2.1).

The increased presence of women in the new faculty cohort is apparent across nearly all institutional types. Even at research universities, where women have historically been least visible, they have increased their representation from about one-fifth of the senior cohort to about one-third of the new cohort. Indeed, close to one-half of all women faculty at research universities (47.9 percent) belonged to the new entry cohort.

Women's numerical presence has increased to the point where they have achieved parity with men in the new faculty cohort at liberal arts colleges and 2-year colleges.

When program area is considered, women showed an increased presence in the new cohort in all fields except business (where they continued to constitute about one-third of the faculty) and the health sciences (where they had already achieved approximate parity with men in the senior cohort). The largest proportionate increase was accounted for by three fields. In the fine arts, women, who constituted about one-quarter of the senior cohort, have achieved rough parity with men in the new cohort. In education the data showed that women, who constituted 45.8 of the senior cohort, have moved into a majority position in the new cohort (64.4 percent). In the humanities, women constituted about one-third (36.2 percent) of the senior cohort and about one-half (53.9 percent) of the new cohort. While these increases are in "traditionally" female fields, such traditionally male fields as engineering and the natural sciences showed an increased female presence among the new cohort.

Expressed in other terms, the number of new entry women was so sizable relative to the existing senior female faculty that they now constituted: 74 percent of all women faculty in engineering, 45 percent of all women faculty in the social sciences, 45 percent of all women faculty in the natural sciences, 42 percent of all women faculty in the fine arts, 40 percent of all women faculty in education, 38 percent of all women faculty in the humanities, and 36 percent of all women faculty in business.[8]

Race/ethnicity

The new entrants were more diverse in terms of race and ethnicity than their predecessors (table 3.3). While 11.7 percent of the senior cohort faculty were minority (i.e., American Indian/Alaskan Native; Asian or Pacific Islander; black, non-Hispanic; and Hispanic), the proportion among the new entrants rose to 16.9 percent. Moreover, 42.2 percent of all current minority faculty were hired during the seven years beginning in 1986 ((172,319 x .169) / (514,976 x .134)). White, non-Hispanic faculty, at 83.1 percent, still comprised by far the largest share of new faculty hires, though their proportion was less than it was among the senior generation (88.3 percent). Although the categories reported here obscure differences within racial groupings, the only change occurred for Asian and Pacific Islander faculty who accounted for a 3.3 percent greater share among new hires—from 4.4 to 7.7 percent—than among the senior faculty. Indeed, the new-entry Asian/Pacific Islander faculty comprised almost one-half (45.6 percent) of the total newly hired minority faculty. The representation of blacks, American Indians/Alaskan Natives, and Hispanics remained unchanged for senior versus new faculty.

In considering gender as well as race/ethnicity, the representation of white faculty in the new cohort declined (and, conversely, the proportion of minority faculty increased) for both men and women. That increased minority presence was, however, highly circumscribed. Asian and Pacific Island men were the new generation's biggest gainers, nearly doubling from 4.8 percent among all senior men to 9.3 percent of the new-entry cohort of men. New entry Asian women also increased their share, albeit to a lesser extent. Among black faculty, women outnumber men in the new cohort. Overall, female minority faculty, who accounted for 31.2 percent of all minority faculty in the senior cohort, have recently fared better because minority women comprised 38.4 percent of all new-entry minority faculty. (Among non-Asian minority faculty, the proportion of women increased from 36.7 percent of senior minority faculty to 46.8 percent of the new entry minority faculty).

In sum, the new faculty cohort is more diverse than their predecessors. Meanwhile, the percentage of white women rose from about one-quarter of the entire senior cohort (24.9 percent) to about one-third (34.3 percent) of the new hires.

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[8] For purposes of this report, the following program areas have been aggregated into the category "Professional:" agriculture/home economics, business, communications, education, engineering, health sciences, law, and occupationally specific programs. The "Liberal arts and sciences" category includes the humanities, the social and natural sciences, and the fine arts.

Citizenship Status and Nativity

The data in table 3.4 showed a rise in the percentage of faculty members who were not native-born U.S. citizens: one in six new entrants (16.9 percent) compared to only one in nine (11.5 percent) among the senior faculty. When institutional type is factored in, it can be seen that the largest influx of foreign-born faculty (including naturalized U.S. citizens and both permanent and temporary residents) has occurred at research universities—about one-quarter (26.6 percent) of new entrants at these institutions were not U.S. natives compared to 17.0 percent among the senior faculty—and, to a lesser extent, at the other doctorate-granting and public comprehensive institutions. Their numbers declined as one moves to institutions offering a baccalaureate or associate's degree so that at liberal arts colleges and at community colleges, there were no differences in the percentage of non-native born U.S. citizens between faculty in the new and senior cohorts.

When program area was taken into account, there was a consistent decline in U.S. citizenship among new cohort faculty across all program areas—except education, the fine arts, and the miscellaneous category "all other programs." One of the largest increases in non-native born faculty was, however, among the new cohort natural scientists: one in four (24.7 percent) new entry natural science faculty were not native-born versus one in seven (14.4 percent) senior natural science faculty. In considering country of origin, it is important to understand that naturalized U.S. citizens and permanent residents may have immigrated to the U.S. at an early age and/or have resided here for a long time—often attenuating the cultural diversity they bring to their respective colleges and universities. Nevertheless, the surge in diversity by place of birth is noteworthy.

Summary

The new generation of academic career entrants was readily distinguishable from the senior faculty cohort. First, they were more diverse demographically than previous generations, most dramatically in terms of the increase in the proportion of women (40.8 versus 28.5 percent) (table 3.2). Second, greater racial/ethnic diversification also was evident (16.9 versus 11.6 percent) (table 3.3). This is most notable in the increase of Asians/Pacific Islanders (from 4.4 percent to 7.7 percent); indeed, Asian/Pacific Island males accounted for 9.3 percent of all newly - hired male faculty (table 3.3). Third, the proportion of non-native-born faculty has increased among the new entrants (16.9 versus 11.5 percent) (table 3.4). Fourth, in terms of their academic program areas, a considerably larger proportion of the new entrants versus senior faculty held appointments outside the traditional liberal arts (51.0 versus 44.9 percent, respectively) (table 2.2).

Two caveats are in order. First, while the pattern and direction of demographic change toward greater diversity were unmistakable, nonetheless the numerical representation of women and racial/ethnic minorities, even in the new academic generation, continues to be low, in absolute terms. Second, while the changes appeared dramatic in contrasting the new entrants with the large residual senior group, it may indeed be that change has been occurring much more gradually and that such steady growth would be revealed in a more refined cohort analysis of multiple subgroups of faculty varying in the lengths of their higher education careers.

Table 3.1—Mean age and age distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Number	Mean	Age (%) <30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
All faculty[1]	514,976	48.2	1.3	6.6	12.1	16.9	18.5	18.2	13.2	8.8	3.4	1.1
New faculty[2]	172,319	42.1	3.7	16.9	24.3	20.6	13.9	10.0	5.8	3.2	1.1	0.5
Senior faculty[2]	342,657	51.2	0.1	1.3	6.0	15.0	20.8	22.4	17.0	11.6	4.6	1.4
Gender												
New faculty												
Male	101,974	42.3	3.0	17.5	25.3	19.7	12.4	10.0	6.4	3.9	1.5	0.4
Female	70,345	41.8	4.7	16.1	22.8	22.0	16.0	10.0	4.9	2.3	0.6	0.7
Senior faculty												
Male	244,860	52.0	0.1	1.1	4.9	13.4	19.7	22.8	18.4	13.0	5.1	1.6
Female	97,797	49.3	0.3	1.9	8.7	19.0	23.5	21.4	13.3	7.9	3.2	0.9
Type and control												
New faculty												
All institutions	172,319	42.1	3.7	16.9	24.3	20.6	13.9	10.0	5.8	3.2	1.1	0.5
All research institutions	50,866	40.6	3.4	19.6	30.5	20.9	10.0	6.6	4.6	3.1	1.2	0.1
All other doctorate-granting institutions[3]	26,361	41.3	2.7	20.8	26.8	21.4	12.3	6.9	5.5	1.7	1.2	0.8
All comprehensive institutions	39,929	42.8	3.7	16.6	20.8	20.5	15.2	11.8	6.0	3.9	1.1	0.4
Private liberal arts institutions	12,662	41.3	4.8	17.4	26.9	20.0	14.8	6.8	5.5	1.9	1.6	0.3
Public 2-year institutions	33,283	43.6	4.5	11.9	17.9	20.3	18.8	15.2	6.9	3.5	0.5	0.5
All other institutions[4]	9,217	45.4	4.5	10.0	16.9	19.4	15.0	15.2	8.9	6.2	2.6	1.5
Senior faculty												
All institutions	342,657	51.2	0.1	1.3	6.0	15.0	20.8	22.4	17.0	11.6	4.6	1.4
All research institutions	90,727	51.8	0.0	1.1	5.9	16.0	19.9	19.6	16.9	13.1	5.6	1.8
All other doctorate-granting institutions[3]	49,845	51.2	0.1	2.2	5.6	16.1	20.0	22.0	15.5	11.8	4.7	2.2
All comprehensive institutions	91,490	51.4	0.3	0.9	5.8	13.0	20.8	24.2	17.7	11.8	4.5	1.0
Private liberal arts institutions	24,764	50.8	0.0	1.1	7.1	17.0	22.1	18.4	16.2	12.8	4.7	0.7
Public 2-year institutions	70,246	50.6	0.2	1.6	5.8	14.7	22.4	25.3	17.3	9.1	2.9	0.8
All other institutions[4]	15,586	51.1	0.0	1.8	7.5	14.7	18.6	22.2	17.9	9.9	5.8	1.6

Table 3.1—Mean age and age distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Number	Mean	Age (%)									
			<30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
Program area[5]												
New faculty												
All program areas	166,045	42.2	3.6	16.9	24.2	20.7	13.9	10.0	5.9	3.3	1.1	0.5
Professions	59,966	42.6	2.4	17.1	21.0	23.7	13.7	10.7	6.0	4.1	1.0	0.3
Liberal arts and sciences	81,297	41.4	4.2	17.4	27.1	19.6	14.0	8.8	5.1	2.5	1.0	0.4
Fine arts	8,394	41.9	3.7	17.3	25.0	19.2	15.4	10.3	6.0	1.4	1.1	0.7
Humanities	21,504	42.2	4.3	13.5	24.4	19.6	18.8	11.2	5.5	1.8	0.7	0.1
Natural sciences	33,141	41.2	4.0	17.6	29.7	19.8	11.1	8.2	5.8	2.1	1.3	0.3
Social sciences	18,258	40.6	4.5	21.4	26.7	19.3	13.1	6.4	3.1	4.3	0.6	0.6
All other program areas	24,782	43.5	4.9	14.8	22.2	16.9	13.8	12.4	8.0	3.9	1.9	1.2
Senior faculty												
All program areas	337,096	51.2	0.1	1.3	6.0	15.0	20.7	22.4	17.1	11.5	4.5	1.4
Professions	105,416	50.9	0.2	1.7	6.9	16.0	21.7	19.5	15.9	12.2	4.7	1.3
Liberal arts and sciences	185,647	51.5	0.1	1.1	5.7	14.1	20.2	24.1	17.8	11.2	4.6	1.2
Fine arts	22,651	50.8	0.5	1.6	7.1	16.8	19.3	20.1	19.1	10.8	4.3	0.5
Humanities	53,275	52.4	0.1	0.6	4.2	11.1	20.3	25.5	18.7	13.2	4.8	1.5
Natural sciences	70,241	51.2	0.1	1.5	6.1	14.9	20.4	24.0	17.0	10.0	4.6	1.4
Social sciences	39,480	51.3	0.1	0.6	6.0	15.0	20.1	24.9	17.1	11.0	4.4	1.0
All other program areas	46,033	51.1	0.0	1.6	5.3	16.2	20.6	22.2	16.8	11.2	4.0	2.2

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.2—Percentage distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Type and control of institution and program area	All faculty[1]		New faculty[2]		Senior faculty[2]		New females as percent of all females
	Male	Female	Male	Female	Male	Female	
Type and control							
All institutions	67.4	32.7	59.2	40.8	71.5	28.5	41.8
All research institutions	75.4	24.6	67.2	32.8	80.0	20.0	47.9
Public	77.0	23.0	67.8	32.2	81.8	18.2	48.0
Private	70.0	30.0	65.5	34.5	73.1	26.9	47.5
All other doctorate-granting institutions[3]	72.3	27.7	67.1	33.0	75.0	25.0	41.1
Public	70.5	29.5	62.1	37.9	74.7	25.3	43.2
Private	75.9	24.2	76.0	24.0	75.7	24.3	36.0
All comprehensive institutions	66.2	33.8	56.3	43.7	70.5	29.5	39.3
Public	66.7	33.4	56.9	43.1	70.8	29.2	38.6
Private	65.1	34.9	55.0	45.0	69.8	30.2	40.9
Private liberal arts institutions	61.0	39.0	49.3	50.7	66.9	33.1	43.9
Public 2-year institutions	55.8	44.2	46.8	53.2	60.1	39.9	38.7
All other institutions[4]	70.3	29.7	63.1	36.9	74.5	25.5	46.1
Program Area							
All program areas	67.4	32.7	59.0	41.0	71.5	28.5	41.4
Professions	59.9	40.1	56.0	44.0	62.1	37.9	39.8
Business	69.7	30.3	67.4	32.7	70.8	29.2	36.3
Education	48.2	51.8	35.6	64.4	54.2	45.8	40.0
Engineering	94.0	6.0	88.0	12.0	97.5	2.5	74.0
Health sciences	47.3	52.7	47.7	52.3	47.0	53.0	39.4
Liberal arts and sciences	70.8	29.2	60.2	39.8	75.5	24.6	41.5
Fine arts	67.0	33.0	49.0	51.0	73.6	26.4	41.7
Humanities	58.8	41.3	46.1	53.9	63.9	36.2	37.6
Natural sciences	79.5	20.5	71.4	28.7	83.3	16.7	44.8
Social sciences	72.9	27.1	61.6	38.4	78.1	21.9	44.9
All other program areas	71.8	28.2	62.6	37.4	76.8	23.3	46.4

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.3—Racial/ethnic distribution of full-time faculty, by faculty seniority and gender: Fall 1992

Faculty seniority and gender	Number	Race/Ethnicity				
		American Indian/ Alaskan Native	Asian or Pacific Islander	Black Not Hispanic	Hispanic	White Not Hispanic
All faculty[1]	514,976	0.5	5.5	4.9	2.5	86.6
New faculty[2]	172,319	0.5	7.7	5.7	3.1	83.1
Senior faculty[2]	342,657	0.4	4.4	4.6	2.3	88.3
Gender						
New faculty						
Male	101,974	0.5	9.3	4.6	3.1	82.4
Female	70,345	0.5	5.3	7.2	3.0	84.1
Senior faculty						
Male	244,860	0.5	4.8	3.6	2.4	88.8
Female	97,797	0.4	3.4	7.0	2.0	87.3

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.4—Percentage distribution of full-time faculty, by citizenship status, faculty seniority, and type and control of institution: Fall 1992

Faculty seniority and type and control of institution	Number	Citizenship status			
		Native U.S. citizen	Naturalized U.S. citizen	Permanent resident	Temporary resident
All faculty[1]	514,976	86.7	6.7	5.4	1.2
New faculty[2]	172,319	83.1	5.3	8.8	2.8
Senior faculty[2]	342,657	88.5	7.4	3.7	0.4
Type and control					
New faculty					
All institutions	172,319	83.1	5.3	8.8	2.8
All research institutions	50,867	73.4	6.1	14.6	6.0
Public	37,085	76.3	6.6	12.8	4.3
Private	13,782	65.5	4.6	19.2	10.7
All other doctorate-granting institutions[3]	26,361	80.7	6.8	9.3	3.1
Public	17,028	81.1	6.0	9.9	3.0
Private	9,333	80.0	8.5	8.2	3.3
All comprehensive institutions	39,929	86.3	4.5	7.7	1.6
Public	28,017	84.8	5.3	8.2	1.7
Private	11,912	89.6	2.6	6.5	1.3
Private liberal arts institutions	12,662	89.5	4.0	5.6	0.9
Public 2-year institutions	33,283	92.9	3.9	3.2	0.1
All other institutions[4]	9,217	86.2	6.7	5.3	1.8
Senior faculty					
All institutions	342,657	88.5	7.4	3.7	0.4
All research institutions	90,727	83.0	10.5	5.9	0.6
Public	71,224	84.3	10.0	5.1	0.6
Private	19,502	78.3	12.4	8.8	0.5
All other doctorate-granting institutions[3]	49,845	86.4	8.6	4.8	0.3
Public	33,553	86.7	8.3	4.8	0.3
Private	16,293	85.7	9.1	4.9	0.3
All comprehensive institutions	91,490	90.2	6.4	3.0	0.4
Public	65,860	90.2	6.1	3.2	0.5
Private	25,630	90.1	7.2	2.6	0.2
Private liberal arts institutions	24,764	91.4	5.8	2.8	0.1
Public 2-year institutions	70,246	94.2	4.7	1.1	0.1
All other institutions[4]	15,586	86.7	6.9	5.4	1.0

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 3.5—Percentage distribution of full-time faculty, by citizenship status, faculty seniority, and program area: Fall 1992

Faculty seniority and program area	Number	Citizenship Status			
		Native U.S. citizen	Naturalized U.S. citizen	Permanent resident	Temporary resident
All faculty[1]	514,976	86.7	6.7	5.4	1.2
New faculty[2]	172,319	83.1	5.3	8.8	2.8
Senior faculty[2]	342,657	88.5	7.4	3.7	0.4
Program area[3]					
New faculty					
All program areas	166,045	83.8	5.1	8.7	2.4
Professions	59,966	84.0	5.6	7.8	2.6
Business	13,293	85.8	4.0	9.2	1.0
Education	11,326	96.8	1.8	1.4	0.1
Engineering	9,278	64.4	13.4	19.9	2.3
Health sciences	26,069	84.6	5.4	5.5	4.6
Liberal arts and sciences	81,297	81.5	5.4	10.6	2.5
Fine arts	8,394	88.6	5.9	4.8	0.8
Humanities	21,504	84.5	5.0	8.0	2.5
Natural sciences	33,141	75.3	6.3	14.6	3.8
Social sciences	18,258	85.9	3.8	9.3	1.1
All other program areas	24,782	90.8	3.0	4.6	1.7
Senior faculty					
All program areas	337,096	88.5	7.4	3.7	0.4
Professions	105,416	88.1	8.1	3.5	0.3
Business	26,149	92.0	4.8	2.9	0.2
Education	23,826	94.9	3.6	1.5	0.1
Engineering	15,838	67.1	22.7	9.2	1.0
Health sciences	39,604	89.8	7.2	2.9	0.1
Liberal arts and sciences	185,647	87.7	7.7	4.1	0.5
Fine arts	22,651	94.9	3.0	1.9	0.2
Humanities	53,275	87.2	9.0	3.3	0.5
Natural sciences	70,241	85.6	9.1	4.7	0.6
Social sciences	39,480	87.7	6.2	5.5	0.5
All other program areas	46,033	93.0	4.4	2.5	0.1

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Section 4: Educational Background and Work History of the New Entrants

To what extent, and in what ways, is the demographic diversification of new career entrants reflected in their emerging careers? And how do the careers of these newcomers compare with those of the senior faculty? Based on NSOPF-93, the following array of variables was examined: the level of highest degree; age at receipt of their highest degree and at appointment to the position they held in the Fall of 1992; and the nature of their employment previous to the current job (employment sector and functional responsibility).

Level of Highest Degree

New faculty were more likely to report the master's or baccalaureate as their highest degree compared to the senior cohort who more often reported the doctorate as their highest degree (table 4.1). When institutional type of the new hires' current affiliation is considered, master's degree holders were less likely to be represented on the faculties of research universities and other doctorate granting universities. Also, in terms of program area, more new faculty in the natural sciences and the social sciences (about 75 percent) than in the humanities (55 percent) held doctorates or professional degrees, possibly reflecting, for example, large numbers of non-doctorate faculty specialists hired to teach writing. However, a cautionary note is in order: a number of faculty members whose highest degrees were shown as master's or bachelor's presumably were pursuing a higher degree at this relatively early stage of their careers; accordingly, the degree distributions for the new and senior cohorts are not strictly comparable. Even so, it is noteworthy that at this stage the new cohort of women faculty were about as likely to hold a master's degree as their highest degree (44.2 percent) as a doctorate or professional degree (48.4 percent). This contrasted to the highest degrees held by new-cohort men: 71.0 percent held doctorates or professional degrees and only 22.4 percent had only a master's degree. To some extent this surely reflects the larger number of women hired at 2-year institutions and in fields for which the doctorate is less crucial. And, presumably, many of these women were currently pursuing doctorates. Nevertheless, the contrast between new-cohort women and men in this regard was striking.

Age at Award of Highest Degree and at Appointment to Current Position

Contrary to what might be predicted based on evidence of the increasing length of graduate study in some fields (Bowen and Rudenstine, 1992), the data in table 4.2 showed that new career entrants were receiving their highest degrees (master's or doctorates/professional degrees) at almost precisely the same age as their senior colleagues—the early thirties.[9] However, while new entrants were receiving their highest degrees in their early thirties, they were being hired into their current positions at a later age than senior faculty had been (38-39 versus 35-36 years old, respectively). Or consider another way of viewing these data: senior faculty members on average were hired into their current position about four years after completing their highest degree while for the new generation the interval was about six and one-half to seven years after completing their highest degree.

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[9] The term "highest" degree is employed rather than "terminal" degree. For a number of faculty members, their current highest degree is not "terminal," in that, for example, some who hold master's degrees are at work on, and will eventually earn, doctoral degrees.

This development raises a number of questions: Have new entrants, after earning their highest degrees, simply bounced around among a number of short-term academic positions prior to assuming their current position? Were they more likely than their senior colleagues to have held term appointments that were not renewed or to have been denied tenure? Have they simply taken much longer to find a full-time academic position in a difficult job market? These questions lead us to look more closely into the previous work history of new career entrants, especially their employment experiences following receipt of their highest degree in order to understand better the transition from graduate study to a full-time faculty appointment in the contemporary academy.

Work (Previous Employment) History

New career entrants were less likely to have had previous employment experience in postsecondary institutions than senior faculty (table 4.3), and they were more likely than senior faculty to have worked in an employment sector outside postsecondary education.[10] This is reflected in the larger percentages of new hires relative to senior faculty who had worked previously in for-profit businesses, hospitals and the federal government.

Viewed by function rather than sector (table 4.4), new entrants have had a greater diversity of previous work responsibilities than senior faculty. Compared to their predecessors, smaller proportions of new entrants than senior faculty reported previous teaching experience, while larger proportions of the new entrants than senior faculty reported previous experience in research, clinical services, and technical activities.

How is this differential pattern of previous work experience to be interpreted? To what extent does it represent intentionally temporary employment undertaken while completing graduate study or actual post graduate degree forays into the non-academic job market? To address these questions, the dates reported under previous employment history were used to identify those previous positions that were first assumed after the date of receipt of the highest degree and before the current position. Tables 4.5 and 4.6 display the patterns of post highest degree and pre current position employment reported by new and senior faculty. While most of these post-highest degree/pre-current position employment experiences for senior faculty were teaching positions (about three-quarters of the senior faculty had such experience), only about one-quarter of the new entrants holding doctoral degrees had previous full-time teaching positions (24.4 percent) and only about one-half of those holding master's degrees (56.8 percent) had previous full-time teaching positions. Moreover, new faculty held a wider variety of non-teaching positions before assuming their current position, especially in research and clinical services.

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[10] Because of the way the question was worded, we do not know for certain that this is true. The question asked for the three most recent and significant main jobs held during the past 15 years. The extent to which individuals held positions outside of postsecondary institutions more than 15 years ago is not known. See question 19 of the 1993 NSOPF *Faculty Questionnaire* for the exact wording of the question.

Table 4.1—Percentage distribution of full-time faculty, by highest degree level, faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Number	Highest degree level		
		Professional or doctoral	Master's	Bachelor's or less
All faculty[1]	514,976	66.3	28.9	4.8
New faculty[2]	172,319	61.7	31.3	7.0
Senior faculty[2]	342,657	68.6	27.7	3.8
Gender				
New faculty				
Male	101,974	71.0	22.4	6.6
Females	70,345	48.4	44.2	7.5
Senior faculty				
Male	244,860	75.0	21.6	3.4
Female	97,797	52.5	43.1	4.5
Type and control				
New faculty				
All institutions	172,319	61.7	31.3	7.0
All research universities	50,867	85.0	12.5	2.5
All other doctorate-granting institutions[3]	26,361	81.1	16.6	2.3
All comprehensive institutions	39,929	63.2	34.3	2.4
Private liberal arts institutions	12,662	58.2	38.8	2.9
Public 2-year institutions	33,283	15.1	60.9	24.1
All other institutions[4]	9,217	43.1	47.6	9.3
Senior faculty				
All institutions	342,657	68.5	27.7	3.8
All research universities	90,727	90.4	8.7	0.9
All other doctorate-granting institutions[3]	49,845	85.9	13.4	0.7
All comprehensive institutions	91,490	76.7	22.5	0.8
Private liberal arts institutions	24,764	66.3	31.4	2.3
Public 2-year institutions	70,246	20.7	66.0	13.4
All other institutions[4]	15,586	55.4	38.1	6.5

Table 4.1—Percentage distribution of full-time faculty, by highest degree level, faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Number	Highest degree level		
		Professional or doctoral	Master's	Bachelor's or less
Program area[5]				
New faculty				
All program areas	166,045	62.0	31.2	6.8
Professions	59,966	60.3	31.9	7.8
Liberal arts and sciences	81,297	66.1	30.7	3.3
Fine arts	8,394	34.2	58.8	7.1
Humanities	21,504	55.4	42.0	2.5
Natural sciences	33,141	76.1	19.7	4.2
Social sciences	18,258	74.7	24.3	1.0
All other program areas	24,782	52.6	31.5	15.9
Senior faculty				
All program areas	337,096	68.7	27.6	3.7
Professions	105,416	65.6	30.1	4.2
Liberal arts and sciences	185,647	72.4	26.0	1.6
Fine arts	22,651	41.4	54.1	4.4
Humanities	53,275	72.6	26.6	0.7
Natural sciences	70,241	75.8	22.4	1.9
Social sciences	39,480	83.7	15.6	0.8
All other program areas	46,033	60.9	28.6	10.5

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 4.2—Average age of full-time faculty[1] at award of highest degree and at appointment to current position, by faculty seniority and highest degree level: Fall 1992

Faculty seniority and highest degree	Age when granted Highest degree			Age when hired in current position		
	Mean	Median	Mode	Mean	Median	Mode
New faculty[2]	32	29	30	39	37	37
Doctorate	32	30	31	39	36	37
Master's	32	29	29	39	38	39
Senior faculty[2]	32	30	30	36	34	34
Doctorate	32	30	30	36	34	35
Master's	31	29	29	35	33	34

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 4.3—Percentage of full-time faculty with previous employment, by faculty seniority and previous employment sector: Fall 1992

Previous employment sector	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	514,976	66.8	172,319	78.8	342,657	60.8
			Faculty with previous employment			
All sectors	343,995	100.0	135,716	100.0	208,279	100.0
4-year college/university	209,379	60.9	66,425	48.9	142,955	68.6
2-year college	43,738	12.7	12,736	9.4	31,002	14.9
Elementary/secondary	46,367	13.5	18,596	13.7	27,771	13.3
Consulting	26,786	7.8	12,178	9.0	14,608	7.0
Hospital	41,021	11.9	21,094	15.5	19,927	9.6
Foundation or other nonprofit	22,660	6.6	11,457	8.4	11,203	5.4
For-profit business	62,536	18.2	32,583	24.0	29,953	14.4
Federal government	38,101	11.1	18,659	13.8	19,442	9.3
Other	15,502	4.5	7,719	5.7	7,783	3.7

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Percents shown for a specific sector represent the percentage of faculty with previous employment in a full-time position during the past 15 years who had previous employment in that specific sector. Details will not add to total because faculty could have been previously employed in multiple sectors.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 4.4—Percentage of full-time faculty with previous employment, by faculty seniority and primary responsibility in previous employment: Fall 1992

Previous employment responsibility	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	514,976	66.8	172,319	78.8	342,657	60.8
			Faculty with previous employment			
All responsibilities	343,995	100.0	135,716	100.0	208,279	100.0
Teaching	211,338	61.4	54,128	39.9	157,211	75.5
Research	73,419	21.3	37,303	27.5	36,116	17.3
Technical activities	41,731	12.1	19,796	14.6	21,934	10.5
Clinical services	37,363	10.9	20,138	14.8	17,225	8.3
Public service	11,640	3.4	6,257	4.6	5,383	2.6
Administration	61,106	17.8	26,114	19.2	34,992	16.8
Other	50,710	14.7	24,811	18.3	25,899	12.4

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Percents shown for a specific responsibility represent the percentage of faculty with previous employment in a full-time position during the past 15 years who had previous employment with that specific responsibility. Details will not add to total because faculty could have had multiple employments with different primary responsibilities.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 4.5—Percentage of full-time faculty who have held a job other than their current one since receiving their highest degree, by faculty seniority, highest degree level, and primary responsibility of previous employment: Fall 1992

Degree level and previous employment responsibility	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	514,976	24.2	172,319	33.8	342,657	19.4
Highest degree[3]						
Doctorate[4]	339,359	23.4	105,490	32.2	233,868	19.5
Master's	148,058	24.3	53,518	34.6	94,541	18.5
	Faculty with previous employment since receiving their highest degree					
Doctorate[4]	79,550	100.0	33,940	100.0	45,609	100.0
Teaching	44,413	55.8	8,266	24.4	36,147	79.3
Research	31,648	39.8	17,181	50.6	14,467	31.7
Technical services	4,539	5.7	2,074	6.1	2,465	5.4
Clinical services	9,558	12.0	5,968	17.6	3,590	7.9
Public service	2,369	3.0	1,272	3.8	1,097	2.4
Administration	14,825	18.6	6,852	20.2	7,973	17.5
Other	8,222	10.3	3,760	11.1	4,462	9.8
Master's	36,014	100.0	18,545	100.0	17,469	100.0
Teaching	25,225	70.0	10,527	56.8	14,698	84.1
Research	1,786	5.0	989	5.3	797	4.6
Technical services	5,221	14.5	3,112	16.8	2,109	12.1
Clinical services	4,498	12.5	2,555	13.8	1,942	11.1
Public service	1,490	4.1	916	4.9	574	3.3
Administration	9,491	26.4	5,490	29.6	4,002	22.9
Other	6,695	18.6	4,211	22.7	2,484	14.2

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Numbers for highest degree will not add to all faculty because individuals with less than a master's degree are not included.

[4] Included in this category are faculty with a doctorate or a first-professional degree.

NOTE: Details will not add to total because faculty could have had multiple employments with different primary responsibilities.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 4.6—Percentage of full-time faculty who have held a job other than their current one since receiving their highest degree, by faculty seniority, highest degree level, and previous employment sector: Fall 1992

Degree level and previous employment sector	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	514,976	24.2	172,319	33.8	342,657	19.4
Highest degree[3]						
Doctorate[4]	339,359	23.4	105,490	32.2	233,868	19.5
Master's	148,058	24.3	53,518	34.6	94,541	18.5
	Faculty with previous employment since receiving their highest degree					
Doctorate[4]	79,550	100.0	33,940	100.0	45,609	100.0
Within academe	73,125	91.9	28,679	84.5	44,446	97.4
Outside academe	40,353	50.7	21,566	63.5	18,787	41.2
Master's	36,014	100.0	18,545	100.0	17,469	100.0
Within academe	30,462	84.6	14,117	76.1	16,345	93.6
Outside academe	25,897	71.9	14,541	78.4	11,356	65.0

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Numbers for highest degree will not add to all faculty because individuals with less than a master's degree are not included.

[4] Included in this category are faculty with a doctorate or a first-professional degree.

NOTE: Details will not add to total because faculty could have had previous employment in more than one sector.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Section 5: Appointment Characteristics and Satisfaction Levels of the New Entrants

Based on the NSOPF-93 faculty survey, four aspects of the academic appointments and job satisfactions are available upon which to compare the emerging careers of the new cohort with the senior cohort. These variables include: academic rank, type of appointment, job and career satisfaction.

Academic Rank

Approximately two-fifths (42.5 percent) of the new entrants were at the assistant professor level (their modal rank), and one-fifth (20.1 percent) held the rank of instructor (table 5.1). At the higher range, one-fourth of the new entrants had already attained the ranks of either associate professor (15.0 percent) or professor (11.9 percent). There was a large difference between the two cohorts in the proportion appointed to the three traditional "ladder" ranks (assistant, associate, and full-professor): 69.5 percent of the new cohort held such appointments compared to 84.1 percent of the senior cohort.[11]

Table 5.1 shows differences among the academic fields in the proportion of new-entry faculty who were appointed in one of the three ladder ranks. The highest percentage were for the social science faculty (79.1 percent) and the natural science faculty (76.2 percent). But only 62.1 percent of the new entry humanities faculty held those ranks, probably reflecting a considerable number of non-tenure track appointments for foreign language and writing specialists.

Type of Appointment

Coinciding with the differences in rank between new and senior faculty just noted above, the two cohorts differed as well in the kind of academic appointment they held, particularly in regard to whether they were in tenurable (either tenured or tenure track) positions. Table 5.2 shows the tenure status of new entrants compared to the senior faculty. The new generation faculty were earlier in their careers and thus less likely to be tenured: 23.9 percent compared to 73.0 percent of the more experienced cohort. More significantly, the new entrants also were less likely to be in the tenure stream: fully one-third (33.2 percent) were not in tenure-eligible positions compared to one-sixth (16.5 percent) of the senior cohort. When gender is considered, female faculty (both new and senior) were more likely to be employed in non-tenure track positions than males. Moreover, the new generation of male faculty was more likely than the new female faculty to have been awarded tenure already (29.1 versus 16.5 percent, respectively). Compared to their senior counterparts, new faculty of both genders were about 17 percent less likely to be on a tenure track (that is, either already tenured or in a tenure-eligible appointment).

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[11] Strictly speaking, it is not known what proportion of the senior cohort held ladder rank appointments during the "first seven years" of their careers. While it is possible, it is unlikely, that a large percentage of senior faculty initially did not hold ladder ranks, but were moved into the ladder ranks later in their careers.

Viewed by institutional type, lower percentages of non-tenure track appointments for new entrants were reported at public 2-year colleges than at other types of colleges and universities. Part of the reason for this is that a higher proportion of 2-year institutions than other types of institutions do not even have a tenure system in place for their faculty. In fact, if you look at new faculty who were not on a tenure track or did not have a tenure system available to them, the percentages are higher or the same for new faculty at 2-year institutions versus new faculty at other types of institutions.

New-generation faculty at 2-year colleges (28.8 percent) together with those at research universities (29.3 percent) were much more likely to have obtained tenure already than their counterparts at the other categories of institutions.

Viewed by program area, new faculty in most program areas were much more likely to hold non-tenure track appointments than senior faculty.

Job Satisfaction

Table 5.3 shows how new entrants compared with the senior cohort on several dimensions of job satisfaction. On the whole, satisfaction levels with the various dimensions of work were moderately high. Compared to their senior counterparts, new entrants were less satisfied with their current jobs in a number of respects. The biggest inter-cohort gap was in satisfaction with job security (70.5 percent very or somewhat satisfied versus 86.5 percent)—but, after all, few new generation faculty, as previously noted, had yet to obtain tenure and fully one-third held non-tenurable appointments. In most respects, however, except for salary and benefits (the two dimensions ranked lowest by both cohorts), new entrants were less satisfied than senior faculty with workload (66.7 percent somewhat or very satisfied versus 70.1 percent of the senior cohort), prospects for advancement (65.8 percent somewhat or very satisfied versus 71.2 percent of the senior cohort), freedom for outside consulting (76.4 somewhat or very satisfied versus 81.0 percent of the senior cohort), opportunities for spouse's employment (68.5 percent somewhat or very satisfied versus 75.8 percent of the senior cohort), and keeping current in their field (44.9 percent versus 50.3 percent of the senior cohort).

Taking gender into account, women in both cohorts reported less satisfaction than male faculty on all scales (except benefits and spousal employment). In both cohorts, women were less satisfied with their salaries than their male colleagues (49.0 percent somewhat or very satisfied versus 56.4 percent of the males among new faculty; 49.9 percent somewhat or very satisfied versus 57.9 of the males among the senior cohort). When institutional type is considered, new generation faculty reported lower satisfaction than senior faculty across all sectors on job security, advancement opportunities, keeping current in their field, and freedom for outside consulting. Only new faculty in the research university sector reported significantly lower satisfaction than senior faculty with the workload dimension (67.3 percent somewhat or very satisfied versus 77.3 percent of the senior cohort).

Career Satisfaction

The NSOPF-93 faculty survey contained two global measures, often used in similar surveys, that attempt to get at faculty members' overall attitude about their work and chosen career. The first item asked: "If I had to do it over again, I would still choose an academic career." The substantial majority of faculty—male and female in both cohorts and in each institutional type and program area—either agreed somewhat or agreed strongly (table 5.4). The only differences between new and senior faculty were reported by the natural scientists, with the senior faculty more likely to replicate their academic career choice (91.7 percent somewhat or strongly agreed versus 86.6 percent of the new cohort).

The second measure asks about satisfaction with "my job here, overall." Again, the responses across all categories were positive, but generally not as strong as with the "I'd do it again" item. Expressed in percentages, a substantial majority of faculty reported satisfaction (either "somewhat" or "very satisfied") with their job overall: 82.1 percent of the new generation and 85.3 percent of their senior colleagues.

Among women, senior faculty reported somewhat lower levels of satisfaction than their male colleagues, while among the new cohort, any such gender differences in job satisfaction disappeared. Among institutional types, new-generation faculty were found to be less satisfied overall than senior faculty only at the other doctorate-granting institutions (78 percent somewhat or very satisfied versus 85 percent of the senior cohort). And among the various program areas, new and senior faculty reported similar satisfaction levels with their job overall.

Summary

The new academic generation entered their academic careers later (table 4.2) and with a more varied work history both in and outside higher education (tables 4.3 and 4.4). A large segment (about one-third) of the new generation was more likely than their seniors to have entered into "temporary" or "term" positions that do not offer the traditional academic career ladder (table 5.2). Indeed, the new-entry cohort was significantly less satisfied with their job security and prospects for advancement, and most other indicators of job satisfaction than their senior colleagues (table 5.3).

Table 5.1—Percentage distribution of full-time faculty, by rank, faculty seniority, type and control of institution, and program area: Fall 1992

Faculty seniority, type and control of institution, and program area	Number	Academic rank Professor	Associate Professor	Assistant Professor	Instructor	Lecturer	Other	No Rank
All faculty[1]	514,976	32.1	24.0	23.1	13.2	2.0	2.6	3.0
New faculty[2]	172,319	11.9	15.0	42.6	20.1	3.2	4.8	2.4
Senior faculty[2]	342,657	42.3	28.5	13.3	9.8	1.5	1.5	3.2
Type and control								
New faculty								
All institutions	172,319	11.9	15.0	42.6	20.1	3.2	4.8	2.4
All research institutions	50,865	15.7	18.0	44.8	5.1	6.3	9.6	0.5
All other doctorate-granting institutions[3]	26,361	12.1	13.3	57.7	12.9	1.7	2.1	0.2
All comprehensive institutions	39,929	10.6	16.8	50.5	17.0	3.0	1.9	0.2
Private liberal arts institutions	12,662	8.4	15.0	52.0	17.1	2.9	3.7	0.9
Public 2-year institutions	33,283	8.5	7.3	16.5	55.0	0.5	3.8	8.4
All other institutions[4]	9,217	13.6	22.6	33.6	15.4	1.0	4.7	9.1
Senior faculty								
All institutions	342,657	42.3	28.5	13.3	9.8	1.5	1.5	3.2
All research institutions	90,727	54.4	29.6	9.6	1.4	2.9	1.8	0.3
All other doctorate-granting institutions[3]	49,845	44.6	33.2	13.8	5.7	1.4	1.2	0.1
All comprehensive institutions	91,490	43.5	32.9	17.7	3.9	1.3	0.3	0.4
Private liberal arts institutions	24,764	40.4	33.0	19.1	3.7	1.0	1.2	1.6
Public 2-year institutions	70,246	25.3	16.8	9.7	33.4	0.3	2.6	11.9
All other institutions[4]	15,586	37.1	26.2	15.3	9.1	0.3	1.7	10.3
Program area[5]								
New faculty								
All program areas	166,045	12.1	15.4	43.3	20.6	3.3	3.0	2.3
Professions	59,966	12.2	16.1	42.0	22.0	3.1	3.3	1.5
Business	13,293	10.6	14.9	43.2	22.4	2.4	3.7	2.9
Education	11,326	10.7	22.8	38.2	21.4	2.8	2.4	1.7
Engineering	9,278	12.8	21.4	44.7	15.1	1.2	3.7	1.2
Health sciences	26,069	13.4	11.8	42.1	24.5	4.2	3.2	0.8

Table 5.1—Percentage distribution of full-time faculty, by rank, faculty seniority, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, type and control of institution, and program area	Academic rank							
	Number	Professor	Associate Professor	Assistant Professor	Instructor	Lecturer	Other	No Rank
Liberal arts and sciences	81,297	11.7	16.0	45.0	18.3	3.5	2.7	2.8
Fine arts	8,394	12.0	14.8	45.0	16.4	4.4	4.0	3.4
Humanities	21,504	9.6	13.4	39.1	26.5	6.6	0.8	4.0
Natural sciences	33,141	12.9	17.9	45.4	16.4	1.9	3.3	2.3
Social sciences	18,258	12.0	16.0	51.1	12.9	2.5	3.4	2.0
All other program areas	24,782	13.3	11.8	41.1	24.9	3.1	3.5	2.3
Senior faculty								
All program areas	337,096	42.6	28.5	13.4	9.8	1.5	1.1	3.2
Professions	105,416	35.3	31.6	18.3	10.3	1.2	1.2	2.2
Business	26,149	33.0	31.4	18.4	11.8	0.8	0.6	4.0
Education	23,826	33.9	33.2	15.8	10.9	2.1	2.3	1.8
Engineering	15,838	51.2	32.7	8.8	5.5	0.5	0.5	0.8
Health sciences	39,604	31.3	30.2	23.4	10.8	1.3	1.2	1.7
Liberal arts and sciences	185,647	46.8	27.7	10.9	8.0	1.8	1.0	3.9
Fine arts	22,651	42.2	30.8	12.5	6.5	1.9	1.3	4.8
Humanities	53,275	43.6	26.8	11.8	10.0	2.6	0.8	4.5
Natural sciences	70,241	49.0	26.1	9.5	9.1	1.4	1.0	4.0
Social sciences	39,480	50.2	29.8	11.3	4.4	1.2	1.0	2.2
All other program areas	46,033	42.5	24.9	11.9	15.7	1.0	1.5	2.5

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 5.2—Percentage distribution of full-time faculty, by tenure status, faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Number	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure for faculty status	No tenure system at institution
All faculty[1]	514,976	56.6	21.4	9.7	4.4	8.0
New faculty[2]	172,319	23.9	42.9	17.0	7.0	9.2
Senior faculty[2]	342,657	73.0	10.5	6.0	3.2	7.3
Gender						
New faculty						
Male	101,974	29.1	42.8	14.7	5.6	7.8
Female	70,345	16.5	43.2	20.2	8.9	11.2
Senior faculty						
Male	244,860	78.4	8.7	4.4	2.5	6.0
Female	97,797	59.5	14.9	10.1	4.9	10.7
Type and control						
New faculty						
All institutions	172,319	23.9	42.9	17.0	7.0	9.2
All research institutions	50,867	29.3	41.8	19.7	8.5	0.7
Public	37,085	32.3	40.6	18.0	9.0	0.1
Private	13,782	21.1	45.0	24.5	7.1	2.3
All other doctorate-granting institutions[3]	26,361	20.1	51.1	20.2	6.7	1.9
Public	17,028	20.2	51.0	21.7	7.1	0.0
Private	9,333	20.0	51.4	17.4	5.9	5.4
All comprehensive institutions	39,929	20.4	50.8	19.9	5.8	3.1
Public	28,017	23.0	49.8	20.7	5.5	1.1
Private	11,912	14.3	53.3	18.1	6.5	7.8
Private liberal arts institutions	12,662	17.2	46.3	19.7	5.2	11.6
Public 2-year institutions	33,283	28.8	33.2	8.1	6.5	23.4
All other institutions[4]	9,217	12.2	22.1	7.8	9.0	48.9
Senior faculty						
All institutions	342,657	73.0	10.5	6.0	3.2	7.3
All research institutions	90,727	80.9	6.9	7.5	3.6	1.2
Public	71,224	83.2	7.0	6.6	2.8	0.4
Private	19,502	72.4	6.6	10.6	6.5	3.9
All other doctorate-granting institutions[3]	49,845	72.0	13.7	9.2	3.7	1.5
Public	33,553	74.7	12.6	9.8	2.7	0.3
Private	16,293	66.4	15.8	8.1	5.7	4.1
All comprehensive institutions	91,490	77.7	13.6	5.4	2.1	1.2
Public	65,860	78.8	13.7	5.1	2.1	0.3
Private	25,630	74.9	13.2	6.2	1.9	3.8
Private liberal arts institutions	24,764	64.4	15.6	6.3	4.8	9.0
Public 2-year institutions	70,246	67.6	7.2	2.7	2.6	20.0
All other institutions[4]	15,586	40.7	10.0	5.4	5.7	38.1

Table 5.2—Percentage distribution of full-time faculty, by tenure status, faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Number	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure for faculty status	No tenure system at institution
Program area[5]						
New faculty						
All program areas	166,045	24.5	44.0	16.2	6.0	9.4
Professions	59,966	22.2	43.0	18.5	6.4	9.8
Business	13,293	17.9	49.6	14.6	6.2	11.8
Education	11,326	28.5	43.0	14.3	7.5	6.7
Engineering	9,278	26.5	52.2	8.3	5.2	7.8
Health sciences	26,069	20.2	36.4	26.1	6.4	10.9
Liberal arts and sciences	81,297	25.9	45.2	15.3	5.3	8.4
Fine arts	8,394	21.8	44.3	14.3	4.3	15.3
Humanities	21,504	22.9	41.0	17.6	8.1	10.4
Natural sciences	33,141	29.1	45.4	13.9	5.1	6.5
Social sciences	18,258	25.4	50.1	15.5	2.7	6.3
All other program areas	24,782	25.5	42.3	13.4	7.4	11.4
Senior faculty						
All program areas	337,096	73.4	10.5	5.9	2.8	7.4
Professions	105,416	67.2	13.4	8.5	2.7	8.2
Business	26,149	70.4	13.2	4.3	3.0	9.1
Education	23,826	70.6	12.9	8.9	2.9	4.7
Engineering	15,838	79.8	11.1	2.5	0.8	5.9
Health sciences	39,604	58.0	14.6	13.4	3.2	10.8
Liberal arts and sciences	185,647	77.2	8.7	4.5	2.8	6.9
Fine arts	22,651	68.4	11.5	4.8	2.6	12.7
Humanities	53,275	75.9	8.2	5.0	3.4	7.4
Natural sciences	70,241	78.7	8.1	4.8	2.8	5.7
Social sciences	39,480	81.1	8.6	3.3	2.2	4.8
All other program areas	46,033	72.6	11.7	5.3	3.0	7.4

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 5.3—Percentage of full-time faculty satisfied with selected job dimensions, by faculty seniority, gender, and type and control of institution: Fall 1992

Faculty seniority, gender, and type and control of institution	Percentage of faculty somewhat or very satisfied with each of the following items:							
	Workload	Job security	Advancement opportunities	Keeping current in field	Freedom for outside consulting	Salary	Benefits	Spouse employment
All faculty[1]	69.0	81.1	69.4	48.5	79.5	54.8	75.2	73.4
New faculty[2]	66.7	70.5	65.8	44.9	76.4	53.4	75.4	68.5
Senior faculty[2]	70.1	86.5	71.2	50.3	81.0	55.6	75.1	75.8
Gender								
New faculty								
Male	69.0	72.8	69.5	50.2	78.4	56.4	75.2	67.3
Female	63.3	67.1	60.6	37.3	73.6	49.0	75.6	70.3
Senior faculty								
Male	73.3	88.4	74.3	54.7	83.0	57.9	75.1	76.0
Female	62.2	81.5	63.3	39.3	76.0	49.9	75.3	75.3
Type and control								
New faculty								
All institutions	66.7	70.5	65.8	44.9	76.4	53.4	75.4	68.5
All research institutions	67.3	67.9	68.0	50.7	79.0	54.8	75.6	65.4
All other doctorate-granting institutions[3]	68.1	67.7	65.2	47.9	77.1	54.9	75.3	70.6
All comprehensive institutions	63.3	67.7	64.3	38.8	74.3	48.1	72.6	66.6
Private liberal arts institutions	61.8	65.9	67.1	29.7	74.1	43.1	66.9	64.0
Public 2-year institutions	69.6	83.3	64.8	46.6	75.7	59.5	82.9	75.2
All other institutions[4]	70.5	65.6	64.7	46.5	75.0	55.6	71.3	70.5
Senior faculty								
All institutions	70.1	86.5	71.2	50.3	81.0	55.6	75.1	75.8
All research institutions	77.3	86.9	74.3	59.1	86.3	56.5	75.4	75.5
All other doctorate-granting institutions[3]	73.0	84.7	70.6	55.0	82.3	55.3	73.4	76.4
All comprehensive institutions	62.6	87.3	71.6	45.2	80.3	50.3	73.4	73.7
Private liberal arts institutions	64.7	86.1	77.2	40.8	77.8	52.0	66.6	74.6
Public 2-year institutions	70.6	87.8	65.1	46.1	76.6	62.0	81.3	79.1
All other institutions[4]	69.8	79.0	69.5	49.0	74.3	58.5	74.9	76.3

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Deta[illegible] may not add to total because of rounding.

SOURCE: U.S. [illegible]epartment of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table 5.4—Percentage of full-time faculty satisfied with selected career dimensions, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Percentage of faculty who would choose an academic career again[1]	Percentage of faculty satisfied with overall job[2]
All faculty[3]	89.1	84.2
New faculty[4]	88.7	82.2
Senior faculty[4]	89.2	85.2
Gender		
New faculty		
Male	88.7	82.9
Female	88.7	81.2
Senior faculty		
Male	89.6	85.9
Female	88.4	83.5
Type and control		
New faculty		
All institutions	88.7	82.2
All research institutions	86.3	80.6
All other doctorate-granting institutions[5]	89.5	78.3
All comprehensive institutions	88.9	81.5
Private liberal arts institutions	89.2	82.2
Public 2-year institutions	90.9	89.2
All other institutions[6]	89.8	79.8
Senior faculty		
All institutions	89.2	85.2
All research institutions	89.3	84.9
All other doctorate-granting institutions[5]	88.2	84.5
All comprehensive institutions	89.3	83.3
Private liberal arts institutions	90.2	84.0
Public 2-year institutions	89.5	89.5
All other institutions[6]	89.0	83.1

Table 5.4—Percentage of full-time faculty satisfied with selected career dimensions, by faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Percentage of faculty who would choose an academic career again[1]	Percentage of faculty satisfied with overall job[2]
Program area[7]		
New faculty		
All program areas	88.8	82.4
Professions	90.2	84.1
Liberal arts and sciences	88.2	80.7
Fine arts	87.0	78.1
Humanities	89.4	81.0
Natural sciences	86.6	80.7
Social sciences	90.3	81.7
All other program areas	87.3	83.5
Senior faculty		
All program areas	89.4	85.3
Professions	88.7	87.6
Liberal arts and sciences	89.7	83.3
Fine arts	88.8	79.8
Humanities	87.4	81.0
Natural sciences	91.7	85.3
Social sciences	89.8	85.0
All other program areas	89.4	87.9

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[1] Percentage of faculty who somewhat or strongly agreed with the following statement: "If I had it to do over again, I would still choose an academic career."

[2] Percentage of faculty who were somewhat or very satisfied with: "My job here, overall."

[3] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[4] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[5] Includes medical schools.

[6] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[7] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Section 6: Summary and Conclusions

The comparison of two cohorts of academics—the new and the senior generations—has demonstrated both similarities and dissimilarities between them. The ways in which the new entrants are like and unlike their predecessors has important implications for who the future faculty will be and what priorities they will bring with them to their academic tasks.

Perhaps the most striking characteristic of the new faculty cohort is its sheer size. Contrary to what many observers would have expected, there has been a lot of movement into faculty ranks in recent years. While general perceptions have been of a quiescent academic labor market, in fact the marketplace has been more porous—more dynamic than static—at least in some important respects. By the calculations here, fully one-third of all full-time faculty in the Fall of 1992 had seven years or less full-time faculty experience. Indeed, a formidable 41 percent of all full-time faculty at private research universities fell into the new-faculty cohort. Quietly, almost invisibly, a large number of faculty members have been infused into the ranks of the full-time faculty between 1986 and 1992—a development examined further in the section on implications. Meanwhile, a summary comparing the two cohorts' characteristics follows.

Summary

The new generation of academic career entrants in the Fall of 1992 was much more diverse demographically than the previous generations in terms of the numerical ascendance of women (table 3.2), but also in the increased representation of racial/ethnic minorities (particularly Asian/Pacific Islander males, table 3.3) and foreign nationals (table 3.4). Taking just these factors of gender, race/ethnicity and nativity into account, the distinctive background of the new academic generation signals a sizable shift in the characteristics of the American faculty—although clearly the American academic profession remains numerically white, male, and U.S. born.

The new entrants differed from the senior cohort both in terms of their institutional and their programmatic homes. Proportionately more hiring of new faculty took place at the doctorate-granting institutions; indeed, 36 percent of all full-time faculty in the research university category qualify as new compared to 30 percent at the comprehensive and 32 percent at the public 2-year institutions (table 2.1). A more dramatic shift was evident in the distribution of new faculty members among program areas: their programmatic venues were considerably more likely than previous generations to fall outside the traditional liberal arts fields (table 2.2).

The new entrants embarked on their academic careers with a richer variety of previous work experiences (tables 4.3 and 4.4). They were more likely than their senior counterparts to have begun academic employment in "temporary" or "term" positions rather than starting out on the traditional academic career ladder (tables 5.1 and 5.2). They were, not surprisingly, less satisfied with their job overall, especially with their job security and their prospects for advancement (tables 5.3 and 5.4). Overall, however, they were as satisfied as the senior cohort in their choice of an academic career (table 5.4).

Implications for the Future Faculty and their Work

In considering the implications of the changing characteristics of the new generation of academics, the starting point must be the large size of this cohort. Because the new-entrant cohort is so large—we measure it at 172,319 out of the total of 514,976 full-time faculty members or fully one-third of all full-time faculty—it is likely to have a much more pervasive influence in shaping academic values and practices in the years ahead than if the new cohort had been substantially smaller. What, then, are the implications that can be drawn from this sizable cohort's characteristics?

First the new cohort is demographically different from the senior cohort. White males, as noted, were the dominant presence in the older cohort. With the increasing presence of women and minority faculty, the white males' "share" has shrunk—although they still maintain their overall plurality.

Second, the proportion of the faculty within the traditional arts and science fields is shrinking and the concomitant expansion in the proportion of faculty in the professions and occupational programs. The liberal arts core of higher education is declining numerically; and that will likely mean a weakening among the faculty of the values associated with doctoral education in the traditional arts and sciences.

Third, the proportion of faculty who are tenurable (either tenured or tenure-track) is shrinking. This powerful trend can be seen in two parallel developments. One is the large number of faculty who are part time (see footnote 4). The second trend is the contraction in the proportion of tenure-track positions as increasing numbers of faculty appointments are made in other categories, some short-term, others longer term, but all less closely coupled with the host institution and its future.

Fourth, it appears that different sectors within higher education are being affected differently by prevailing conditions. That is, data from the NSOPF-93 faculty survey suggested that faculty in some types of institutions were faring better than their counterparts in other types of institutions. In particular, new faculty at 2-year community colleges defied the trend of declining job satisfaction perceptible in other institutional sectors: they were as satisfied as their senior, more established colleagues. Moreover, faculty at 2-year community colleges were the most satisfied with their salary and benefits. New faculty at research and other doctoral granting universities appear to be at a relative disadvantage to their senior colleagues; and faculty at private liberal arts colleges were least satisfied overall—senior as well as new entrants.

In sum, the faculty responses to the NSOPF-93 faculty survey provide a lens through which the future of the academic profession and, indeed, of higher education can be viewed. The lens may be more translucent than clear; unpredictable events will intervene to recast higher education's future. But the view from the vantage point afforded by this survey presages a faculty more richly diverse in their origins and in the careers they are pursuing.

Appendix A: Technical Notes

Technical Notes

Overview

The 1992–93 National Study of Postsecondary Faculty (NSOPF–93) was sponsored by the U.S. Department of Education's National Center for Education Statistics (NCES). The study received additional support from the National Science Foundation (NSF) and the National Endowment for the Humanities (NEH). It was conducted by NORC, the National Opinion Research Center at the University of Chicago, under contract to NCES.

The first cycle of NSOPF was conducted in 1987–88 (NSOPF–88) with a sample of 480 institutions (including 2-year, 4-year, doctorate-granting, and other colleges and universities), over 3,000 department chairpersons, and over 11,000 faculty. The second cycle of NSOPF, conducted in 1992–93, was limited to surveys of institutions and faculty, but with a substantially expanded sample of 974 public and private nonproprietary higher education institutions and 31,354 faculty. The study was designed to provide a national profile of faculty: their professional backgrounds, responsibilities, workloads, salaries, benefits, and attitudes.

Institution Universe

The definition of the institution universe for NSOPF–93 was identical to the one used in NSOPF–88. It included institutions in the traditional sector of higher education: that is, institutions whose accreditation at the college level is recognized by the U.S. Department of Education, that provide formal instructional programs of at least two years' duration, that are public or private not-for-profit, and that are designed primarily for students who have completed the requirements for a high school diploma or its equivalent.

Faculty Universe

Unlike NSOPF–88, which was limited to faculty whose regular assignment included instruction, the faculty universe for NSOPF–93 was expanded to include all those who were designated as faculty, whether or not their responsibilities included instruction, and other (non-faculty) personnel with instructional responsibilities. Under this definition, researchers and administrators and other institutional staff who hold faculty positions, but who do not teach, were included in the sample. Instructional staff without faculty status also were included. In summary, the eligible universe was defined to include:

- full- and part-time personnel whose regular assignment included instruction;
- full- and part-time individuals with faculty status whose regular assignment did not include instruction;
- permanent and temporary personnel with any instructional duties, including adjunct, acting, or visiting status;

- faculty and instructional personnel on sabbatical leave.

Excluded from the NSOPF–93 universe of faculty were:

- faculty and other personnel with instructional duties outside the U.S. (but not on sabbatical leave);
- temporary replacements for faculty and other instructional personnel;
- faculty and other instructional and non-instructional personnel on leave without pay;
- graduate teaching assistants;
- military personnel who taught only ROTC courses;
- instructional personnel supplied by independent contractors.

Sample Design

A two-stage stratified clustered probability design was used to select the NSOPF–93 sample. The first-stage NSOPF–93 sampling frame consisted of the 3,256 postsecondary institutions that provided formal instructional programs of at least two years' duration and that were public or private, not-for-profit, drawn from the 1991–92 IPEDS (Integrated Postsecondary Education Data System[12]) Institutional Characteristics Survey. The sampling frame was sorted by type and control of institution to create groups of institutions called strata. The selection of institutions occurred independently within each stratum.

A modified Carnegie[13] classification system was used to stratify institutions according to cross-classification of control by type, first into 17 cells, and then into 15 strata. There were two levels of control, public and private, and nine types of institutions including:

1. Research universities (public or private): These institutions offer a full range of baccalaureate programs, are committed to graduate education through the doctorate, and

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[12] IPEDS is a recurring set of surveys developed and maintained by NCES. Postsecondary education is defined by IPEDS as "the provision of a formal instructional program whose curriculum is designed primarily for students who have completed the requirements for a high school diploma or its equivalent." This definition includes programs whose purpose is academic, vocational and continuing professional education and excludes a vocational and adult basic education. IPEDS encompasses all institutional providers of postsecondary education in the United States and its outlying areas. For more information on IPEDS data used in this study, see National Center for Education Statistics, *IPEDS Manual for Users* (Washington, D.C.: National Center for Education Statistics, 1991). This manual is also distributed with IPEDS data on CD-ROM.

[13] See *A Classification of Institutions of Higher Education*, (Princeton, N.J.: The Carnegie Foundation for the Advancement of Teaching), 1987. Out of the 3,256 institutions, 278 could not be classified. Carnegie staff supplied updates for 81 institutions; the remaining group of unclassified institutions were designated as "unknown" on the NSOPF–93 sampling frame.

give high priority to research. They award 50 or more doctoral degrees each year. There were 104 research institutions in the NSOPF-93 sampling frame;

2. Other Ph.D. (public or private): These institutions offer a full range of baccalaureate programs and are committed to graduate education through the doctorate. They award annually at least 10 doctoral degrees (in three or more disciplines), or 20 or more doctoral degrees in one or more disciplines. There were 109 other Ph.D. institutions in the NSOPF-93 sampling frame;

3. Comprehensive colleges and universities (public or private): These institutions offer a full range of baccalaureate programs and are committed to graduate education through the master's degree. They award 20 or more master's degrees annually in one or more disciplines. There were 578 comprehensive institutions in the NSOPF-93 sampling frame;

4. Liberal arts colleges (public or private): These institution are primarily undergraduate colleges with major emphasis on baccalaureate degree programs. There were 578 liberal arts institutions in the NSOPF-93 sampling frame;

5. Two-year colleges (public or private): These institutions offer associate of arts certificate or degree programs and, with few exceptions, offer no baccalaureate degrees. There were 1,107 2-year institutions in the NSOPF-93 sampling frame;

6. Independent medical institutions (public or private): Those not considered as part of a 4-year college or university. There were 52 independent medical institutions in the NSOPF-93 sampling frame;

7. Religious colleges (private only): There were 309 religious institutions in the NSOPF-93 sampling frame;

8. Other (public/private): Includes a wide range of professional and other specialized degree-granting colleges and universities. There were 222 other specialized institutions in the NSOPF-93 sampling frame; and

9. Unknown (public/private): There were 197 institutions on the NSOPF-93 sampling frame that did not have a Carnegie classification.

First Stage Sampling

Since there are no public religious institutions, the cross-classification of control by type had 17 cells. However, the desired sampling rates for three of the cells—public research, private research, and public "other Ph.D."—were so close to 100 percent that it was appropriate to sample all of the institutions in those cells. Therefore, a single sampling stratum was constructed for these institutions, and all institutions were selected in that stratum (i.e., selected with certainty). Grouping these institutions together was appropriate from a sampling design and selection standpoint, although this stratum does not comprise a group of analytic interest.

Institutions in the 14 other strata[14] were referred to as "noncertainty" institutions. The stratum sample sizes, determined by a preliminary pass through the 14 strata, were allocated proportional to the total estimated number of faculty and instructional staff in each stratum. In those strata, the first stage selections were made using stratified sampling with probabilities within each stratum proportional to the expected numbers of faculty and instructional staff. Systematic probability proportional to size (PPS) sampling was used with measure of size (MOS) equal to 41 or the estimated number of faculty (and instructional staff), whichever was larger. MOS was defined as the total number of faculty and instructional staff as specified in the most recent IPEDS Fall Staff Survey available (1989–90). Of the 3,256 institutions listed on the sample frame, 3,106 had a MOS available. For the remaining 150 (4.6 percent) institutions for which faculty data were missing, MOS was imputed.

In systematic sampling, the order in which the institutions are listed on the frame is important, as it reflects an implicit stratification. Within each stratum the institutions were sorted by MOS in a "serpentine" manner, i.e., if one stratum was in ascending order by MOS, the next was descending, the one after that was ascending, and so on. This procedure helped to balance the sample with respect to institution size (based on number of faculty). A total of 789 institutions were initially selected and later supplemented with 185 institutions for a total of 974 selected in the first-stage.

Institutions were selected in two replicates. The first replicate "Pool 1" contained the initial sample of noncertainty and certainty institutions. The second replicate "Pool 2" was sorted into random order within strata and contained only noncertainty institutions. Institutions that were determined ineligible or could not be recruited after extensive follow-up were replaced at random by institutions within the same explicit stratum in Pool 2. Replacement institutions for the certainty stratum were selected at random from similar strata. ("Other Ph.D.," "Public Comprehensive," and "Private Comprehensive" sampling strata were used for this purpose.)

Second Stage Sampling

At the second stage of sample selection, the NSOPF–93 sampling frame consisted of lists of faculty and instructional staff obtained from 817 participating institutions. Each institution was randomly assigned a target total sample size, say *n*, of either 41 or 42 faculty to yield the desired average sample size of 41.5. Whenever an institution had fewer than 42 individuals, all faculty and instructional staff were selected. Otherwise, the following oversampling sizes[15] were used to select groups to ensure their adequate representation in the sample and to meet NSF and NEH analytic objectives: full-time females (3.36), blacks or Hispanics (5.60), Asians or Pacific Islanders (1.12), faculty in four NEH disciplines (2.24)—philosophy/religion, foreign languages,

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[14] The "noncertainty" sampling strata were broken down as follows: private, other Ph.D.; public, comprehensive; private, comprehensive; public, liberal arts; private, liberal arts; public, medical; private, medical; private, religious (there are no public religious colleges); public, two-year; private, two-year; public, other; private, other; public, unknown; and private, unknown.

[15] The oversample size for a group is the difference between the expected sample size for the group and the expected sample size that would have been attained if all faculty had been sampled at the same rate, i.e., in the absence of oversampling.

English language and literature, and history—and all others (0.00). All listed individuals who would qualify for more than one group were assigned to the group for which the oversampling rate (here defined as the oversample size divided by the number of individuals qualifying for the group) was largest. These five groups were used as strata for sampling faculty. The residual sample size (*n* minus the sum of the oversample sizes) was allocated across the five strata in proportion to the number of faculty in the strata. Then, the total sample in each stratum (consisting of the oversample size plus the proportionally allocated residual) was specified by simple random sampling without replacement, with the sampling independent from one faculty stratum to the next. For more details about second stage sampling, refer to the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97-467].

Data Collection and Response Rates

Prior to data collection, it was first necessary to obtain cooperation from the sampled institutions. Each institution was asked to provide annotated lists of all faculty and instructional staff according to the eligibility (and oversampling) criteria needed for second stage sampling. Between October 1992 and early March 1993, 26 institutions in the original sample were replaced by randomly selected comparable institutions (from Pool 2): 5 because they were ineligible and 21 because they were determined to be final refusals. After trying to gain cooperation from the initial sample of 789 institutions for almost six months, it was determined that a certain number of other institutions were unlikely to participate in the study. These institutions were identified in March 1993 and 159 additional institutions were randomly selected within the relevant strata (from Pool 2).

Project staff tried to gain cooperation from original and replacement (or supplemental) institutions simultaneously.[16] Of the 974 institutions in the total sample, 12 (1.2 percent) were found to be ineligible.[17] Ineligible institutions included those which had closed or which had merged with other institutions, satellite campuses that were not independent units, and institutions that did not grant any degrees or certificates. A total of 817 eligible institutions agreed to participate (i.e., to provide a list of faculty and instructional staff), for a list participation rate of 84.9 percent (83.4 percent, weighted).

Faculty data collection was conducted between January and December 1993, with a two-month hiatus during July and August while most faculty and instructional staff were on summer break. The faculty survey relied on a multi-modal data collection design which combined an initial mailed questionnaire with mail and telephone prompting supplemented by computer-assisted telephone interviewing (CATI). Questionnaire and follow-up mailings were sent out in large waves between January and July 1993 as the lists were received, sampled, and processed. Coordinators at the participating institutions who signed NCES's affidavit of nondisclosure and confidentiality also assisted in the effort by prompting nonrespondents to return their completed questionnaires to NORC. Of the 31,354 faculty and instructional staff sampled,[18] 1,590 (5.1 percent) were found to be ineligible, which included staff who were deceased or no longer at the institution, staff who did not have a Fall 1992 teaching assignment, and teaching assistants. A total of 25,780 questionnaires were completed for a response rate of 86.6 percent (84.4 percent, weighted). The overall faculty response rate (institution list participation rate multiplied by the faculty questionnaire response rate) was 73.5 percent (70.4 percent, weighted). The unweighted faculty response rate for public 4-year institutions was 87.8 percent and 84.2 percent for private 4-year institutions.

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[16] Since the Pool 2 institutions were additional random selections into the sample, the effect of using Pool 2 institutions is no different than if a larger number of institutions had been selected initially and the pools had not been used at all. The response rates for Pool 1 institutions, and for Pool 1 and Pool 2 institutions combined, have the same expected value. Since it is based on a larger sample, the response rate for Pool 1 and Pool 2 combined is a more accurate estimator of the population response rate.

[17] When ineligible institutions were excluded from the sample, the sum of weights for eligible institutions was 3,188, rather than the 3,256 institutions specified in the sampling frame.

Institution data collection was conducted between September 1993 and May 1994. The institution survey combined a mailed questionnaire with mail and telephone prompting directed at both participating (817 institutions which submitted faculty lists) and nonparticipating institutions (145 institutions), for an eligible sample of 962 institutions. For 385 (44 percent) of the self-administered questionnaires completed, the institutional coordinator who had provided the original list was the main respondent, although other institution staff usually contributed to the effort. A total of 872 institution questionnaires were completed for a response rate of 90.6 percent (93.5 percent, weighted).

Best Estimates of Faculty

In comparing the weighted estimates based on the lists of faculty and instructional staff provided by institutions with those based on the institution questionnaires, several patterns emerged that were contrary to expected results. Although some variance in the estimates based on the lists and the institution questionnaires was expected, the magnitude of the difference was larger than anticipated. This, in and of itself, was not seen as a problem since the estimates were from two different sources. What was less plausible were the trends in the estimates of part-time faculty between NSOPF–88 and NSOPF–93. The institution survey showed a 5 percent increase in the estimate of part-time faculty between the Fall of 1987 and the Fall of 1992. The faculty survey, based on the lists of faculty and instructional staff provided by the institution, showed no change in the percentage of part-time faculty between the two points in time. The weighted estimates based on the lists also showed a 37.5 percent decrease in the number of health sciences faculty and instructional staff from the Fall of 1987 to the Fall of 1992. Institution recontact was necessary to resolve these discrepancies and to determine the "best estimates" of total, full- and part-time faculty and instructional staff.

The best estimates were derived following a reconciliation and verification recontact with a subset of institutions which had discrepancies of 10 percent or greater between the total number enumerated on the faculty list used for sampling and the total number reported on the institution questionnaire. The recontact effort also included 120 institutions identified by NCES as employing health sciences faculty.

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[18] Initially, 33,354 faculty were sampled. To reduce costs, 2,000 nonresponding faculty and instructional staff were randomly eliminated from the sample through subsampling in August 1993. A higher proportion of part-time faculty and instructional staff were eliminated than remained; this was taken into account in the calculation of faculty weights.

Of the 760 "matched" institutions[19] (i.e., institutions which provided both a completed institution questionnaire and a list of faculty and instructional staff), 450 (59 percent) had a discrepancy of 10 percent or more between the questionnaire and the list, and 61 of the 450 had health sciences faculty.

Of the 817 institutions who provided lists of faculty and instructional staff, 509 institutions (450 with 10 percent or greater discrepancies plus an additional 59 institutions with health sciences faculty) were recontacted. Before recontacting each institution, each discrepancy was reviewed to eliminate obvious clerical or list posting errors. A best estimate was obtained for 492 (or 96.7 percent) of these institutions.

It is important to point out that 118 of the reconciled institutions were unable to provide a specific reason for the discrepancies. For the 374 that provided reasons, the most commonly cited reason was the omission of some part- or full-time faculty from the list provided for sampling faculty. This occurred for 107 institutions. Some institutions included certain types of medical faculty in one set of estimates, but not in the other. Downsizing affected faculty counts at several institutions. Another factor in the discrepancies was the time interval (in some instances a year or more) between the time the list of faculty and instructional staff was compiled and the time the institution questionnaire was completed. The list did not always include new hires for the fall term, which were counted in the institution questionnaire. Some institutions provided "full-time equivalents" (FTE's) on the institution questionnaire rather than the actual headcount of part-time staff that was requested. In some instances, however, where part-time faculty and instructional staff were over-reported (on either the list or the questionnaire) the reason involved confusion between the pool of part-time or temporary staff employed by, or available to, the institution and the number actually employed during the fall semester.

NORC used data gathered in the recontacting effort to adjust the original list of faculty and instructional staff to incorporate recontacted institutions' best estimates into the final estimates. The first step in this process used as its starting point the original list, which reported totals for full-, part-time, and total faculty and instructional staff for each of the 817 participating institutions. However, in some cases, institutions which supplied a total number did not supply a breakdown of the total number into full- and part-time components.[20] For these institutions, NORC used a two-step procedure of deriving best estimates: first, deriving "best total estimates" and, second, deriving "best full-time estimates." Best estimates for part-time staff were simply calculated by subtracting the number of full-time staff from the total number at each institution.

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[19] A total of 929 of the 962 eligible institutions (96.6 percent) participated in the survey in some way—either by completing an institution questionnaire or by submitting a faculty list. A total of 872 institutions completed institution questionnaires and 817 institutions provided faculty lists. Of the 817 institutions which submitted faculty lists, 760 of them also completed an institution questionnaire. Therefore, "matched" data—counts of the total number of faculty at the institution drawn from the faculty list and from the institution questionnaire—are available for only these 760 institutions.

[20] Eighty-four of the 817 institutions did not specify the employment status (i.e., full- or part-time) of faculty and instructional staff on their original lists.

The next step in calculating best total estimates involved the substitution of the verified counts from the 492 institutions NORC recontacted. If an institution verified the counts from its original faculty list or was unable to confirm other estimates, the original list estimate was retained as the best estimate. If the institution verified the institution questionnaire data as a more accurate estimate, questionnaire data were substituted for original list data as the best estimate. If the institution provided a different set of estimates, the new estimates were substituted for counts based on original list data.

Institutions which were nonrespondents in the verification effort and which had discrepancies of 10 percent or greater between the estimates of faculty and instructional staff based on the lists provided by institutions and those based on the institution questionnaire were adjusted by multiplying the ratio of verified counts to original counts for the 492 recontacted institutions by the original list count. Original list data were used for the institutions which were not selected for recontact. For all 817 institutions, the source of the final best estimates was as follows:

460 (56.3 percent) used original list data;
280 (34.3 percent) used questionnaire data;
61 (7.5 percent) used new estimates (other than questionnaire or original list data); and
16 (1.9 percent) were ratio-adjusted.

During the reconciliation effort, some ineligible faculty and instructional staff were excluded from the institution-level totals. This happened if recontacted institutions reported that the original faculty list had included ineligible faculty. This information was supplied by 23 institutions. It is assumed that faculty population estimates derived from the best estimate calculations include only eligible faculty. For more discussion of the verification process and calculation of best estimates, see the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97–467].

Weight Calculations

The weights for both the institution and faculty samples were designed to adjust for differential probabilities of selection and nonresponse. (For a detailed description of the weighting process, see the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97–467].) Weights for the institution sample were constructed in three steps. First, the institution's base weight—equal to the reciprocal of its probability of selection into the sample—was calculated. (This step reflected the several steps used to select the institutions from sample Pool 1 and sample Pool 2.) Second, the base weights were adjusted for institutions that had merged and so were effectively listed multiple times in the sampling frame.[21] Finally, a nonresponse adjustment factor was applied to the weights to compensate for institution-level nonresponse. A review of the data indicated that post-stratification adjustment was not needed.

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[21] After the sample was selected and institutions were contacted, NORC discovered that a few of the institutions in the sample had merged with other institutions on the sampling frame. Since a merged institution would be in the sample if any listing of the institution was selected from the frame, its weight must be reduced accordingly.

Weights for the faculty sample were computed in four steps. First, the base conditional selection probabilities were calculated; these reflected the selection rates for faculty members given that their institutions were sampled. In this step, the initial selection probabilities also were adjusted to reflect the exclusion of a random subsample of faculty. (See footnote 8.) Then the reciprocals of these selection probabilities were calculated to yield base conditional weights. Second, these weights were multiplied by the first-stage nonresponse-adjusted weights to yield second-stage sampling weights adjusted for institutional nonresponse. Third, a second-stage nonresponse adjustment factor was applied to these latter weights to compensate for nonresponse by faculty members. Fourth, the nonresponse-adjusted weights were poststratified to the best estimates of total, full-, and part-time faculty and instructional staff by sampling stratum.

The poststratification adjustment should reduce sampling variability, and more importantly reduce any reporting biases and bias due to undercoverage of the faculty sampling frame. Poststratification provides a means of weighting the faculty respondents to represent all faculty on the original faculty sampling frame as well as faculty missed on the frame. The method is entirely analogous to the nonresponse adjustment, where faculty respondents are weighted up to represent themselves as well as the faculty nonrespondents. While the nonresponse adjustment is based upon the assumption that the means of respondents and nonrespondents are similar, the poststratification adjustment is based upon the assumption that the means of covered faculty and missed faculty are similar. Neither assumption is perfect, but the resulting estimates are thought to be more accurate than they would be in the absence of the adjustments.

Imputation of Missing Data

Item nonresponse occurred when a respondent did not answer one or more survey questions. The item nonresponse rates were generally low for the institution and faculty questionnaires, since missing critical (and selected other) items were retrieved by interviewers. The NSOPF–93 faculty questionnaire had a mean item nonresponse rate of .103 for 395 items in six sections. The NSOPF–93 institution questionnaire had a mean item nonresponse rate of .101 for 283 items in four sections.[22] Imputation for item nonresponse was performed for each survey item, to make the study results more inclusive.[23] "Don't know" responses were treated as item nonresponse and imputed for both the institution and faculty questionnaires. However, a second imputation was done for selected items in the faculty questionnaire with "don't know" responses, where this caused 30 percent or more of the responses to be eligible for imputation. In the second imputation, "don't knows" were treated as legitimate responses, and only in a case where there was no response to a survey item was imputation performed. For these items, in the second imputation, missing responses were imputed across all response categories, including the don't know category. This was done to allow researchers to choose how to treat don't knows in their analyses. Not applicable ("NA") responses were not imputed since these represented respondents who were not eligible to answer the relevant item.

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[22] The item nonresponse rate is defined as the ratio of the total number of nonresponses to the total number of individuals eligible to respond to a questionnaire item. The mean item nonresponse rates reported here are the unweighted means of the item nonresponse rates for all items on the questionnaires. For a full description of item nonresponse, see the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97–467].

[23] For more information on imputation of missing data in sample surveys, see Kalton, Graham and Daniel Kasprzyk, "Imputing for Missing Survey Responses." Paper presented at 1982 Proceedings of the Section on Survey Research Methods, American Statistical Association; Kalton, Graham and Daniel Kasprzyk, "The Treatment of Missing Survey Data," *Survey Methodology 12 (1)* (June 1986), pp. 1–16.

Imputation was performed using several procedures. Missing sex, race, and employment status data on the faculty data file were imputed directly from information supplied by institutions on the lists used for sampling faculty and instructional staff, whenever this information was available.

Two statistical procedures, regression-based and hot-deck, were employed to impute other missing data on both data files. Regression-based imputation was used for continuous and dichotomous variables. Hot-deck imputation was used for all other variables. The type of imputation used was recorded by setting the appropriate value of the imputation flag for each survey item.

Sources of Error

The survey estimates provided in the NSOPF–93 analytical reports, published by NCES, are subject to two sources of error: sampling errors and nonsampling errors. Sampling errors occur because the estimates are based on a sample of individuals in the population rather than on the entire population. Sampling errors can be quantified using statistical procedures in which a variance estimate is calculated. In the reports, the variance estimate is the square of the standard error for the mean or proportion (including percent). The standard error measures the variability of the sample estimator in repeated sampling, using the same sample design and sample size. It indicates the variability of a sample estimator that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a mean or proportion would include the true population parameter in about 95 percent of the samples. In general, for large sample sizes (n greater than or equal to 30) and for estimates of the mean or the proportion, the intervals described above provide a 95 percent confidence interval. If sample sizes are too small, or if the parameters being estimated are not means or proportions, then these intervals may not correspond to the 95 percent confidence level.

The standard errors may be used to calculate confidence intervals around each estimate and to compare two or more estimates to determine if the observed differences are statistically significant. For example, table 2.1 in this report shows that 29.5 percent of full-time new entrant faculty were employed in research institutions in the Fall of 1992. The standard error of that estimate is 2.1 (table B2.1). The 95 percent confidence interval for the statistic extends from 25.4 [29.5 - (1.96 x 2.1)] to 33.6 [29.5 + (1.96 x 2.1)] or from 25 to 34 percent. Standard errors for all estimates presented in this report's tables were computed using a technique known as Taylor series approximation. A computer program, SUDAAN,[24] was used to calculate the standard errors. Those opting to calculate variances with the Taylor-series approximation method should use a "with replacement" type variance formula. Specialized computer programs, such as SUDAAN and CENVAR[25] calculate variances with the Taylor-series approximation method.

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[24] Shah, Babubhai V., Beth G. Barnwell, and Gayle S. Bieler, *SUDAAN User's Manual Release 6.4*. (Research Triangle Park, N.C.: Research Triangle Institute), 1995.

Comparisons noted in this report are significant at the .05 level. The significance of the difference between the overall mean (i.e., the mean of the entire population) and a subgroup mean (e.g., between the mean salary of all faculty in all institutions and the mean salary of all faculty in public doctoral institutions) was tested using a t-test in which the standard error of the difference was adjusted for the covariance between the subgroup and the total group. The exact formula for the appropriate t-test is:

$$t = \frac{\overline{X}_S - \overline{X}_T}{\sqrt{se_S^2 + se_T^2 - 2(p)se_S^2}}$$

where $\overline{X_T}$ and se_T are the mean and standard error for the total group, $\overline{X_S}$ and se_S are the mean and standard error for the subgroup, and p is the proportion of the total group contained in the subgroup.

When multiple pairwise comparisons were made, the acceptable minimum significance level was decreased by means of the Bonferroni adjustment.[26] This adjustment takes into account the increased likelihood, when making multiple comparisons, of finding significant pairwise differences simply by chance. With this adjustment, the significance level being used for each comparison (.05) is divided by the total number of comparisons being made.

Sample estimates also are subject to bias from nonsampling errors. It is more difficult to measure the magnitude of these errors. They can arise for a variety of reasons: nonresponse, undercoverage, differences in the respondent's interpretation of the meaning of questions, memory effects, misrecording of responses, incorrect editing, coding, and data entry, time effects, or errors in data processing. For example, undercoverage (in which institutions did not provide a complete enumeration of eligible faculty) and listing of ineligible faculty necessitated the "best estimates" correction to the NSOPF–93 faculty population estimates. For a more detailed discussion of the undercoverage problem, refer to the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97–467]. Whereas general sampling theory can be used, in part, to determine how to estimate the sampling variability of a statistic, nonsampling errors are not easy to measure. Measurement of nonsampling errors usually requires the incorporation of a methodological experiment into the survey or the use of external data to assess and verify survey results.

To minimize the potential for nonsampling errors, the faculty and institution questionnaires (as well as the sample design, data collection, and data processing procedures) were field-tested with a national probability sample of 136 postsecondary institutions and 636 faculty members in

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[25] U.S. Bureau of the Census, *CENVAR IMPS Version 3.1* (Washington D.C.: U.S. Bureau of the Census), 1995.

[26] For an explanation of the Bonferroni adjustment for multiple comparisons, see Miller, Rupert G., *Simultaneous Statistical Inference* (New York: McGraw Hill Co.), 1981 or Dunn, Olive Jean, "Multiple Comparisons Among Means," *Journal of the American Statistical Association 56 (293),* (March 1961), pp. 52–64.

1992. To evaluate reliability, a subsample of faculty respondents were re-interviewed. An extensive item nonresponse analysis of the questionnaires also was conducted followed by additional evaluation of the instruments and survey procedures.[27] An item nonresponse analysis also was conducted for the full-scale surveys. See the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97–467] for a detailed description of the item nonresponse analysis.

In addition, for the full-scale surveys, a computer-based editing system was used to check data for range errors, logical inconsistencies, and erroneous skip patterns. For erroneous skip patterns, values were logically assigned on the basis of the presence or absence of responses within the skip pattern whenever feasible, given the responses. Missing or inconsistent critical items were retrieved. Some small inconsistencies between different data elements remained in the data files. In these situations, it was impossible to resolve the ambiguity as reported by the respondent. All data were keyed with 100 percent verification of a randomly selected subsample of 10 percent of all questionnaires received.

Replicate Weights

Thirty-two replicate weights are provided on the data files for users who prefer another method of variance estimation. These weights implement the balanced half-sample (BHS) method of variance estimation,[28] and they have been created to handle the certainty stratum and to incorporate finite population correction factors for each of the 14 noncertainty strata. Two widely available software packages, WesVarPC®,[29] and PC CARP,[30] have capabilities to use replicate weights to estimate variances.

Analysts should be cautious about use of BHS-estimated variances that relate to one stratum or to a group of two or three strata. Such variance estimates may be based upon far fewer than 32 replicates, and thus the variance of the variance estimator may be large.

A Note About Estimates Based Upon Small Samples

Analysts who use either the restricted use faculty file or the institution file should also be cautious about cross-classifying data so deeply that the resulting estimates are based upon a very small number of observations. Analysts should interpret the accuracy of NSOPF–93 statistics in light of estimated standard errors and of the number of observations used in the statistics.

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[27] A complete description of the field test design and results can be found in Abraham, Sameer Y., *et al., 1992–93 National Study of Postsecondary Faculty: Field Test Report* (Washington, D.C.: U.S. Department of Education, National Center for Education Statistics [NCES:93–390]), February 1994.

[28] For a discussion of the balanced half-sample (BHS) method of variance estimation, see Wolter, Kirk M., *Introduction to Variance Estimation* (New York: Springer-Verlag), 1985, pp. 110–152.

[29] Westat, Inc., *A User's Guide to WesVarPC®, Version 2.0* (Rockville, Md.: Westat, Inc.), 1996.

[30] Fuller, Wayne C., *et al., PC CARP IV.* (Ames, Iowa: Statistical Laboratory, Iowa State University), 1986.

A Special Note About Estimates of Health Sciences Faculty

Problems with estimates of health sciences faculty could only be partly rectified by the creation of new best estimates. The reconciliation effort helped to identify some institutions that failed to list health science faculty on their original faculty lists. However, because faculty list data recorded faculty members' disciplines only for faculty in the four NEH disciplines, it was impossible to poststratify to best estimates for health science faculty.

Health science faculty are more likely to perform individualized instruction or noncredit teaching activities than are other types of faculty participating in NSOPF–93. The largest concentration of faculty who conducted individualized instruction but who did not teach courses, was found in the health sciences. Of the estimated 76,200 faculty who conducted individualized instruction and taught no other course, 31,201, or 41 percent, of the total were health sciences faculty. The next largest group of faculty meeting these criteria were found in the natural sciences (8,805 or 11.6 percent). Because of the importance of individualized instruction to health sciences faculty, selecting for analysis only those faculty who had any for-credit instructional responsibilities may have the unintended consequence of excluding a greater number of health sciences faculty than is warranted. In the *1993 National Study of Postsecondary Faculty: Methodology Report* [NCES 97–467], the problem with health science estimates is discussed further and recommendations are made for future rounds of NSOPF.

Appendix B:

Standard Error Tables

Table B2.1—Standard errors for percentage distribution of full-time faculty, by faculty seniority and type and control of institution: Fall 1992

Type and control of institution	All faculty[1]		New faculty[2]		Senior faculty[2]		New faculty as percent all faculty
	Number	Percent	Number	Percent	Number	Percent	
All institutions	11,158.2	0.00	5,087.4	0.00	7,646.7	0.00	0.6
All research institutions	11,144.8	1.80	4,588.6	2.11	7,307.7	1.80	1.4
Public	11,322.7	1.96	4,260.3	2.19	7,569.3	1.96	1.5
Private	6,614.4	1.27	3,110.4	1.74	3,808.7	1.11	3.1
All other doctorate-granting institutions[3]	5,945.7	1.21	2,352.1	1.39	4,069.7	1.24	1.5
Public	5,063.9	1.05	1,866.7	1.14	3,451.6	1.07	1.5
Private	3,115.7	0.59	1,431.0	0.80	2,156.1	0.61	3.4
All comprehensive institutions	4,206.1	0.80	1,670.0	0.99	3,279.1	0.89	0.9
Public	3,635.5	0.69	1,426.0	0.83	2,856.5	0.78	1.1
Private	2,115.2	0.41	869.1	0.51	1,610.4	0.46	1.6
Private liberal arts institutions	1,619.1	0.33	874.4	0.52	1,111.4	0.34	1.6
Public 2-year institutions	4,088.9	0.75	1,814.8	1.00	2,919.7	0.80	1.1
All other institutions[4]	2,161.1	0.42	970.8	0.56	1,418.1	0.41	2.0

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B2.2—Standard errors for percentage distribution of full-time faculty, by faculty seniority and program area: Fall 1992

Program area	All faculty[1]		New faculty[2]		Senior faculty[2]		New faculty as percent of all faculty
	Number	Percent	Number	Percent	Number	Percent	
Total[3]	10,778.8	0.00	4,878.0	0.00	7,495.7	0.00	0.59
Professions	5,119.1	0.64	2,486.9	0.99	3,514.5	0.70	0.93
Business	1,692.4	0.33	846.7	0.51	1,286.2	0.36	1.59
Education	1,668.6	0.31	740.4	0.44	1,276.4	0.35	1.53
Engineering	1,848.0	0.35	924.5	0.53	1,246.5	0.35	2.24
Health Sciences	3,814.7	0.63	1,930.8	0.95	2,463.1	0.63	1.65
Liberal arts and sciences	6,179.4	0.69	2,825.5	1.04	4,544.3	0.75	0.73
Fine arts	1,992.4	0.38	775.2	0.47	1,509.1	0.43	1.68
Humanities	2,060.8	0.34	945.6	0.56	1,692.8	0.42	1.03
Natural sciences	3,326.2	0.49	1,781.9	0.84	2,551.7	0.60	1.31
Social sciences	2,230.7	0.38	1,237.3	0.63	1,714.0	0.45	1.64
All other program areas	3,186.2	0.54	1,485.6	0.77	2,257.4	0.59	1.35

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B3.1—Standard errors for mean age and age distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Number	Mean	Age (%)									
			<30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
All faculty[1]	11,158.2	0.12	0.13	0.30	0.38	0.39	0.44	0.42	0.40	0.32	0.20	0.12
New faculty[2]	5,087.4	0.21	0.35	0.83	0.90	0.73	0.63	0.55	0.43	0.33	0.18	0.14
Senior faculty[2]	7,646.7	0.11	0.04	0.17	0.29	0.48	0.53	0.53	0.56	0.46	0.27	0.17
Gender												
New faculty												
Male	3,619.1	0.27	0.38	1.16	1.40	1.00	0.79	0.77	0.64	0.51	0.29	0.13
Female	2,330.6	0.27	0.67	0.97	1.06	1.13	0.91	0.71	0.50	0.35	0.17	0.30
Senior faculty												
Male	6,303.2	0.13	0.04	0.19	0.33	0.57	0.64	0.64	0.72	0.59	0.34	0.22
Female	2,465.1	0.17	0.12	0.40	0.58	0.82	0.81	0.82	0.65	0.55	0.36	0.20
Type and control												
New faculty												
All institutions	5,087.4	0.21	0.35	0.83	0.90	0.73	0.63	0.55	0.43	0.33	0.18	0.14
All research institutions	4,588.6	0.50	0.87	2.08	2.21	1.85	1.21	1.02	0.97	0.78	0.45	*
All other doctorate-granting institutions[3]	2,352.1	0.44	0.70	2.52	2.41	1.54	1.39	1.15	1.10	0.54	0.43	0.38
All comprehensive institutions	1,670.0	0.30	0.60	1.24	1.23	1.10	1.14	1.05	0.69	0.61	0.32	0.23
Private liberal arts institutions	874.4	0.65	1.14	1.95	2.49	1.92	2.16	1.22	1.15	0.78	0.58	*
Public 2-year institutions	1,814.8	0.34	0.70	1.19	1.37	1.39	1.46	1.34	0.92	0.65	0.19	*
All other institutions[4]	970.8	0.90	1.14	2.40	2.24	2.64	2.62	2.40	1.87	1.77	0.95	0.88
Senior faculty												
All institutions	7,646.7	0.11	0.04	0.17	0.29	0.48	0.53	0.53	0.56	0.46	0.27	0.17
All research institutions	7,307.7	0.27	*	0.34	0.73	1.24	1.36	1.15	1.51	1.20	0.73	0.40
All other doctorate-granting institutions[3]	4,069.7	0.32	*	0.79	0.65	1.26	1.24	1.32	1.11	1.35	0.64	0.69
All comprehensive institutions	3,279.1	0.17	0.14	0.18	0.50	0.70	0.81	0.88	0.94	0.71	0.43	0.22
Private liberal arts institutions	1,111.4	0.33	*	0.34	0.96	1.57	1.74	1.87	1.64	1.19	0.80	0.40
Public 2-year institutions	2,919.7	0.22	0.09	0.38	0.52	0.88	1.09	1.15	1.03	0.70	0.39	0.22
All other institutions[4]	1,418.1	0.47	*	0.55	1.65	2.18	2.15	2.33	1.97	1.34	1.31	0.63

Table B3.1—Standard errors for mean age and age distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Number	Mean	Age (%)									
			<30	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	>69
Program area[5]												
New faculty												
All program areas	4,878.0	0.21	0.35	0.83	0.92	0.72	0.62	0.56	0.43	0.34	0.19	0.15
Professions	2,486.9	0.30	0.38	1.57	1.21	1.40	1.01	1.00	0.68	0.67	0.27	0.17
Liberal arts and sciences	2,825.5	0.24	0.59	0.98	1.36	1.07	0.83	0.69	0.54	0.42	0.24	0.14
Fine arts	775.2	0.59	1.23	2.51	2.85	2.83	2.63	2.14	1.65	0.71	0.65	0.56
Humanities	945.6	0.32	0.79	1.27	1.76	1.60	1.73	1.20	0.82	0.48	0.31	0.10
Natural sciences	1,781.9	0.67	0.67	1.62	2.42	1.95	1.14	1.18	1.06	0.56	0.50	0.21
Social sciences	1,237.3	0.65	2.10	2.49	2.46	2.32	1.70	1.29	0.78	1.45	0.34	0.41
All other program areas	1,485.6	0.60	1.06	1.70	2.36	1.72	1.48	1.75	1.77	0.90	0.73	0.79
Senior faculty												
All program areas	7,495.7	0.11	0.04	0.18	0.30	0.48	0.54	0.52	0.57	0.45	0.27	0.17
Professions	3,514.5	0.22	0.10	0.42	0.57	0.95	0.96	0.88	0.82	0.79	0.55	0.26
Liberal arts and sciences	4,544.3	0.14	0.06	0.18	0.36	0.57	0.67	0.73	0.73	0.57	0.36	0.20
Fine arts	1,509.1	0.40	0.40	0.49	1.26	1.75	1.80	1.83	2.00	1.43	1.00	0.30
Humanities	1,692.8	0.24	0.09	0.16	0.55	0.78	1.11	1.10	1.05	0.97	0.59	0.37
Natural sciences	2,551.7	0.22	0.04	0.41	0.64	0.99	1.08	1.21	1.16	0.87	0.62	0.32
Social sciences	1,714.0	0.31	0.09	0.30	0.79	1.29	1.47	1.51	1.37	1.11	0.81	0.57
All other program areas	2,257.4	0.29	0.04	0.52	0.63	1.27	1.40	1.36	1.33	1.15	0.62	0.78

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

* Insufficient data to compute a standard error.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B3.2—Standard errors for percentage distribution of full-time faculty, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Type and control of institution and program area	All faculty		New faculty[2]		Senior faculty[2]		New Females as Percent of All Females
	Male	Female	Male	Female	Male	Female	
All Institutions	0.50	0.50	0.88	0.88	0.57	0.57	0.83
Type and control							
All research institutions	0.94	0.94	1.73	1.73	1.09	1.09	0.83
Public	0.90	0.90	2.06	2.06	1.14	1.14	2.37
Private	2.16	2.16	3.02	3.02	2.42	2.42	2.86
All other doctorate-granting institutions[3]	0.86	0.86	1.90	1.90	1.18	1.18	4.20
Public	1.11	1.11	1.99	1.99	1.27	1.27	1.82
Private	1.22	1.22	3.03	3.03	2.47	2.47	2.02
All comprehensive institutions	0.82	0.82	1.54	1.54	0.98	0.98	3.57
Public	0.84	0.84	1.73	1.73	1.09	1.09	1.52
Private	1.97	1.97	3.18	3.18	2.11	2.11	1.87
Private liberal arts institutions	2.44	2.44	3.18	3.18	2.51	2.51	2.59
Public 2-year institutions	0.94	0.94	1.81	1.81	1.12	1.12	2.16
All other institutions[4]	3.18	3.18	4.26	4.26	3.23	3.23	1.40
Program area							
Professions	1.02	1.02	1.80	1.80	1.20	1.20	3.60
Business	1.52	1.52	2.57	2.57	1.81	1.81	1.33
Education	1.74	1.74	3.11	3.11	2.19	2.19	2.35
Engineering	1.00	1.00	2.40	2.40	0.74	0.74	2.17
Health sciences	2.10	2.10	3.38	3.38	2.55	2.55	7.14
Liberal arts and sciences	0.64	0.64	1.17	1.17	0.71	0.71	1.85
Fine arts	1.73	1.73	3.36	3.36	1.91	1.91	3.24
Humanities	1.13	1.13	2.10	2.10	1.28	1.28	1.65
Natural sciences	0.90	0.90	1.76	1.76	0.94	0.94	2.25
Social sciences	1.22	1.22	2.43	2.43	1.27	1.27	2.67
All other program areas	1.28	1.28	2.28	2.28	1.43	1.43	2.40

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B3.3—Standard errors for racial/ethnic distribution of full-time faculty, by faculty seniority and gender: Fall 1992

Faculty seniority and gender	Number	Race/Ethnicity				
		American Indian/ Alaskan Native	Asian or Pacific Islander	Black Not Hispanic	Hispanic	White Not Hispanic
All faculty[1]	11,158.2	0.06	0.26	0.39	0.19	0.52
New faculty[2]	5,087.4	0.11	0.50	0.52	0.30	0.73
Senior faculty[2]	7,646.7	0.07	0.27	0.39	0.21	0.55
Gender						
New faculty						
Male	3,619.1	0.16	0.70	0.54	0.35	0.91
Female	2,330.6	0.13	0.59	0.78	0.42	0.95
Senior faculty						
Male	6,303.2	0.09	0.32	0.34	0.23	0.55
Female	2,465.1	0.12	0.40	0.65	0.30	0.83

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B3.4—Standard errors for percentage distribution of full-time faculty, by citizenship status, faculty seniority, and type and control of institution: Fall 1992

Faculty seniority and type and control of institution	Number	Citizenship status			
		Native U.S. citizen	Naturalized U.S. citizen	Permanent resident	Temporary resident
All faculty[1]	11,158.2	0.47	0.31	0.30	0.15
New faculty[2]	5,087.4	0.92	0.40	0.64	0.40
Senior faculty[2]	7,646.7	0.44	0.37	0.24	0.07
Type and control					
New faculty					
All institutions	5,087.4	0.92	0.40	0.64	0.40
All research institutions	4,588.6	2.32	0.91	1.69	1.17
Public	4,260.3	2.06	1.15	1.72	0.98
Private	3,110.4	5.50	1.26	3.74	2.78
All other doctorate-granting institutions[3]	2,352.1	1.67	1.29	1.13	0.67
Public	1,866.7	2.16	1.31	1.34	0.79
Private	1,431.0	2.63	2.66	1.98	1.23
All comprehensive institutions	1,670.0	1.10	0.58	0.89	0.32
Public	1,426.0	1.42	0.76	1.14	0.41
Private	869.1	1.48	0.74	1.31	0.49
Private liberal arts institutions	874.4	1.83	0.98	1.21	0.37
Public 2-year institutions	1,814.8	0.96	0.66	0.74	0.06
All other institutions[4]	970.8	2.41	1.58	1.72	0.89
Senior faculty					
All institutions	7,646.7	0.44	0.37	0.24	0.07
All research institutions	7,307.7	1.10	0.95	0.67	0.21
Public	7,569.3	1.25	1.06	0.66	0.25
Private	3,808.7	2.09	2.10	1.81	0.31
All other doctorate-granting institutions[3]	4,069.7	1.15	0.91	0.67	0.13
Public	3,451.6	1.31	1.07	0.79	0.13
Private	2,156.1	2.29	1.70	1.26	0.27
All comprehensive institutions	3,279.1	0.68	0.61	0.33	0.12
Public	2,856.5	0.80	0.70	0.40	0.16
Private	1,610.4	1.34	1.20	0.55	0.13
Private liberal arts institutions	1,111.4	1.19	0.79	0.59	0.09
Public 2-year institutions	2,919.7	0.70	0.66	0.28	0.07
All other institutions[4]	1,418.1	2.47	1.51	1.52	0.40

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B3.5—Standard errors for percentage distribution of full-time faculty, by citizenship status, faculty seniority, and program area: Fall 1992

Faculty seniority and program area	Number	Citizenship Status			
		Native U.S. citizen	Naturalized U.S. citizen	Permanent resident	Temporary resident
All faculty[1]	11,158.2	0.47	0.31	0.30	0.15
New faculty[2]	5,087.4	0.92	0.40	0.64	0.40
Senior faculty[2]	7,646.7	0.44	0.37	0.24	0.07
Program area[3]					
New faculty					
All program areas	4,878.0	0.94	0.39	0.66	0.40
Professions	2,486.9	1.49	0.80	0.83	1.05
Business	846.7	2.00	1.02	1.69	0.62
Education	740.4	1.03	0.89	0.53	0.10
Engineering	924.5	4.34	3.13	3.19	1.24
Health sciences	1,930.8	2.56	1.29	1.27	2.32
Liberal arts and sciences	2,825.5	1.12	0.51	1.05	0.36
Fine arts	775.2	2.25	1.81	1.46	0.77
Humanities	945.6	1.57	0.87	1.22	0.67
Natural sciences	1,781.9	2.35	0.96	2.21	0.74
Social sciences	1,237.3	2.09	0.81	1.87	0.39
All other program areas	1,485.6	1.80	0.84	1.53	0.55
Senior faculty					
All program areas	7,495.7	0.44	0.37	0.24	0.07
Professions	3,514.5	0.86	0.77	0.43	0.09
Business	1,286.2	1.13	0.94	0.71	0.19
Education	1,276.4	1.05	0.95	0.49	0.05
Engineering	1,246.5	2.99	2.79	1.74	0.45
Health sciences	2,463.1	1.38	1.18	0.68	0.12
Liberal arts and sciences	4,544.3	0.57	0.48	0.34	0.12
Fine arts	1,509.1	0.96	0.73	0.63	0.18
Humanities	1,692.8	0.98	0.86	0.57	0.14
Natural sciences	2,551.7	1.03	0.87	0.58	0.21
Social sciences	1,714.0	1.28	0.95	0.99	0.36
All other program areas	2,257.4	0.87	0.67	0.56	0.08

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B4.1—Standard errors for percentage distribution of full-time faculty, by highest degree level, faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Number	Highest degree level		
		Professional or Doctoral	Master's	Bachelor's or less
All faculty[1]	11,084.92	0.81	0.69	0.32
New faculty[2]	5,013.64	1.17	1.00	0.53
Senior faculty[2]	7,632.83	0.85	0.75	0.31
Gender				
New faculty				
Male	3,547.02	1.34	1.11	0.66
Females	2,324.88	1.39	1.31	0.67
Senior faculty				
Male	6,292.18	0.89	0.79	0.34
Female	2,461.96	1.18	1.13	0.45
Type and control				
New faculty				
All institutions	5,013.64	1.17	1.00	0.53
All research universities	4,513.76	1.53	1.39	0.74
All other doctorate-granting institutions[3]	2,336.07	1.82	1.73	0.69
All comprehensive institutions	1,670.69	1.73	1.67	0.45
Private liberal arts institutions	868.26	4.41	4.21	1.07
Public 2-year institutions	1,778.78	1.37	1.78	1.84
All other institutions[4]	975.44	5.38	4.34	2.27
Senior faculty				
All institutions	7,632.83	0.85	0.75	0.31
All research universities	7,288.33	0.83	0.78	0.27
All other doctorate-granting institutions[3]	4,058.09	1.27	1.26	0.23
All comprehensive institutions	3,279.50	1.08	1.06	0.18
Private liberal arts institutions	1,117.74	3.21	3.06	0.92
Public 2-year institutions	2,901.50	1.21	1.22	1.25
All other institutions[4]	1,414.57	5.62	4.82	1.78

Table B4.1—Standard errors for percentage distribution of full-time faculty, by highest degree level, faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Number	Highest degree level		
		Professional or Doctoral	Master's	Bachelor's or less
Program area[5]				
New faculty				
All program areas	4,809.71	1.15	1.00	0.51
Professions	2,469.65	1.80	1.60	0.74
Liberal arts and sciences	2,811.62	1.32	1.23	0.52
Fine arts	765.15	3.40	3.43	2.22
Humanities	945.61	2.04	1.99	0.63
Natural sciences	1,784.09	1.88	1.59	0.97
Social sciences	1,234.49	2.63	2.63	0.41
All other program areas	1,472.78	2.93	2.41	1.93
Senior faculty				
All program areas	7,481.83	0.85	0.76	0.31
Professions	3,515.48	1.37	1.26	0.45
Liberal arts and sciences	4,540.75	0.94	0.88	0.23
Fine arts	1,479.52	2.67	2.57	1.02
Humanities	1,693.92	1.37	1.36	0.24
Natural sciences	2,551.49	1.28	1.22	0.43
Social sciences	1,713.62	1.45	1.41	0.32
All other program areas	2,229.42	2.14	1.78	1.29

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B4.2—Standard errors for average age of full-time faculty[1] at award of highest degree and at appointment to current position, by faculty seniority and highest degree level: Fall 1992

Faculty seniority	Age when granted highest degree			Age when hired in current position		
and highest degree	Mean	Median	Mode	Mean	Median	Mode
New faculty[2]	0.15	0.15	0.15	0.20	0.22	0.22
Doctorate	0.17	0.25	0.25	0.25	0.24	0.24
Master's	0.26	0.26	0.26	0.32	0.44	0.44
Senior faculty[2]	0.10	0.12	0.12	0.12	0.15	0.15
Doctorate	0.13	0.13	0.13	0.14	0.19	0.19
Master's	0.17	0.18	0.18	0.21	0.24	0.24

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B4.3—Standard errors for percentage of full-time faculty with previous employment, by faculty seniority and previous employment sector: Fall 1992

Previous employment sector	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	11,158.2	0.54	5,087.4	0.75	7,646.7	0.68
			Faculty with previous employment			
All sectors	7,637.1	0.00	4,148.7	0.00	4,928.4	0.00
4-year college/university	5,523.9	0.72	2,555.5	1.11	4,009.9	0.79
2-year college	1,736.7	0.47	852.4	0.60	1,332.1	0.60
Elementary/secondary	1,581.6	0.43	946.0	0.68	1,115.8	0.51
Consulting	1,266.9	0.34	857.7	0.61	869.6	0.38
Hospital	2,240.9	0.56	1,711.5	1.04	1,170.6	0.51
Foundation or other nonprofit	1,457.4	0.39	1,100.7	0.72	860.0	0.39
For-profit business	2,201.4	0.53	1,449.0	0.91	1,415.8	0.59
Federal government	1,716.0	0.42	1,169.4	0.77	1,098.7	0.47
Other	904.9	0.25	588.8	0.42	654.1	0.30

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Percents shown for a specific sector represent the percentage of faculty with previous employment in a full-time position during the past 15 years who had previous employment in that specific sector. Details will not add to total because faculty could have been previously employed in multiple sectors.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B4.4—Standard errors for percentage of full-time faculty with previous employment, by faculty seniority and primary responsibility in previous employment: Fall 1992

Previous employment responsibility	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	11,158.2	0.54	5,087.4	0.75	7,646.7	0.68
			Faculty with previous employment			
All responsibilities	7,637.1	0.00	4,148.7	0.00	4,928.4	0.00
Teaching	4,854.2	0.76	1,969.6	1.09	3,834.0	0.79
Research	3,443.8	0.74	2,161.4	1.12	2,068.5	0.79
Technical activities	1,765.6	0.46	1,084.0	0.76	1,197.3	0.52
Clinical services	2,166.3	0.56	1,689.4	1.05	1,070.4	0.48
Public service	760.6	0.21	501.4	0.37	532.5	0.25
Administration	2,037.1	0.49	1,253.2	0.82	1,465.6	0.61
Other	1,926.3	0.49	1,223.3	0.81	1,284.3	0.54

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

NOTE: Percents shown for a specific responsibility represent the percentage of faculty with previous employment in a full-time position during the past 15 years who had previous employment with that specific responsibility. Details will not add to total because faculty could have had multiple employments with different primary responsibilities.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B4.5—Standard errors for percentage of full-time faculty who have held a job other than their current once since receiving their highest degree, by faculty seniority, highest degree level, and primary responsibility of previous employment: Fall 1992

Degree level and previous employment responsibility	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	11,158.2	0.51	5,087.4	0.90	7,646.7	0.55
Highest degree[3]						
Doctorate[4]	9,473.2	0.64	4,088.3	1.25	6,648.2	0.68
Master's	3,987.2	0.79	2,034.2	1.43	2,839.3	0.87
	Faculty with previous employment since receiving their highest degree					
Doctorate[4]	3,335.4	0.00	2,069.9	0.00	2,133.6	0.00
Teaching	1,913.4	1.75	579.4	1.85	1,711.6	1.69
Research	2,215.0	1.78	1,486.1	2.45	1,336.4	2.12
Technical services	525.9	0.66	357.0	1.04	364.5	0.79
Clinical services	1,309.5	1.44	1,081.8	2.68	565.6	1.13
Public service	399.8	0.48	300.8	0.87	259.7	0.56
Administration	916.3	1.06	654.0	1.75	627.6	1.25
Other	839.7	0.98	433.9	1.25	601.6	1.20
Master's	1,533.5	0.00	1,037.1	0.00	952.5	0.00
Teaching	1,209.1	1.78	720.3	2.68	829.0	1.89
Research	344.3	0.90	247.1	1.26	205.3	1.11
Technical services	518.8	1.27	408.4	1.93	310.7	1.63
Clinical services	500.0	1.27	382.1	1.84	301.4	1.65
Public service	217.7	0.59	160.3	0.86	152.1	0.85
Administration	690.2	1.51	533.6	2.30	405.9	1.95
Other	555.5	1.38	450.9	2.17	310.1	1.65

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Numbers for highest degree will not add to all faculty because individuals with less than a master's degree are not included.

[4] Included in this category are faculty with a doctorate or a first-professional degree.

NOTE: Details will not add to total because faculty could have had multiple employments with different primary responsibilities.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B4.6—Standard errors for percentage of full-time faculty who have held a job other than their current once since receiving their highest degree, by faculty seniority, highest degree level, and previous employment sector: Fall 1992

Degree level and previous employment sector	All faculty[1]		New faculty[2]		Senior faculty[2]	
	Number	Percent	Number	Percent	Number	Percent
All faculty	11,158.2	0.51	5,087.4	0.90	7,646.7	0.55
Highest degree[3]						
Doctorate[4]	9,473.2	0.64	4,088.3	1.25	6,648.2	0.68
Master's	3,987.2	0.79	2,034.2	1.43	2,839.3	0.87
	Faculty with previous employment since receiving their highest degree					
Doctorate[4]	3,335.4	0.00	2,069.9	0.00	2,133.6	0.00
Within academe	3,051.9	0.92	1,774.9	1.95	2,121.2	0.56
Outside academe	2,340.9	1.62	1,796.9	2.39	1,240.5	1.75
Master's	1,533.5	0.00	1,037.1	0.00	952.5	0.00
Within academe	1,372.2	1.35	898.0	2.31	911.3	1.14
Outside academe	1,258.0	1.60	917.2	2.07	740.2	2.40

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Numbers for highest degree will not add to all faculty because individuals with less than a master's degree are not included.

[4] Included in this category are faculty with a doctorate or a first-professional degree.

NOTE: Details will not add to total because faculty could have had previous employment in more than one sector.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B5.1—Standard errors for percentage distribution of full-time faculty, by rank, faculty seniority, type and control of institution, and program area: Fall 1992

Faculty seniority, type and control of institution and program area	Academic rank Number	Professor	Associate Professor	Assistant Professor	Instructor	Lecturer	Other	No Rank
All faculty[1]	11,158.2	0.76	0.54	0.55	0.56	0.25	0.27	0.30
New faculty[2]	5,087.4	0.85	0.74	1.07	0.91	0.41	0.64	0.29
Senior faculty[2]	7,646.7	0.90	0.70	0.52	0.55	0.21	0.17	0.35
Type and control								
New faculty								
All institutions	5,087.4	0.85	0.74	1.07	0.91	0.41	0.64	0.29
All research institutions	4,588.6	2.33	1.87	2.58	0.99	1.11	1.83	0.29
All other doctorate-granting institutions[3]	2,352.1	1.46	1.27	2.17	2.11	0.52	0.59	0.10
All comprehensive institutions	1,670.0	1.16	1.17	1.58	1.31	0.57	0.56	0.15
Private liberal arts institutions	874.4	1.43	1.93	2.93	2.33	1.13	1.65	0.85
Public 2-year institutions	1,814.8	1.26	0.95	1.95	2.21	0.22	0.64	1.14
All other institutions[4]	970.8	3.69	3.89	4.42	2.32	0.78	2.34	2.88
Senior faculty								
All institutions	7,646.7	0.90	0.70	0.52	0.55	0.21	0.17	0.35
All research institutions	7,307.7	1.90	1.63	1.01	0.35	0.69	0.45	0.19
All other doctorate-granting institutions[3]	4,069.7	1.87	1.78	1.28	0.93	0.37	0.37	0.10
All comprehensive institutions	3,279.1	1.55	1.17	0.91	0.45	0.27	0.12	0.37
Private liberal arts institutions	1,111.4	2.78	2.13	2.11	1.03	0.46	0.78	1.48
Public 2-year institutions	2,919.7	1.98	1.44	1.17	2.12	0.14	0.42	1.15
All other institutions[4]	1,418.1	4.27	3.54	2.41	2.79	0.31	0.71	4.22
Program area[5]								
New faculty								
All program areas	4,878.0	0.86	0.75	1.05	0.93	0.42	0.45	0.29
Professions	2,486.9	1.22	1.18	1.64	1.41	0.86	0.63	0.35
Business	846.7	1.91	2.47	3.13	2.45	0.83	1.24	1.11
Education	740.4	1.97	3.13	2.95	2.42	0.97	0.83	1.00
Engineering	924.5	2.91	3.70	4.15	3.05	0.74	1.96	0.69
Health sciences	1,930.8	2.12	1.60	2.93	2.61	1.85	1.01	0.29

Table B5.1—Standard errors for percentage distribution of full-time faculty, by rank, faculty seniority, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, type and control of institution and program area	Academic rank							
	Number	Professor	Associate Professor	Assistant Professor	Instructor	Lecturer	Other	No Rank
Liberal arts and sciences	2,825.5	0.96	1.21	1.48	1.07	0.47	0.65	0.40
Fine arts	775.2	3.40	2.84	4.36	2.48	1.66	2.31	1.29
Humanities	945.6	1.39	1.42	2.01	2.06	1.14	0.30	0.76
Natural sciences	1,781.9	1.52	1.87	2.15	1.47	0.50	0.92	0.57
Social sciences	1,237.3	2.29	2.33	3.55	1.89	1.04	2.12	0.62
All other program areas	1,485.6	2.02	1.44	2.57	2.32	0.89	0.90	0.66
Senior faculty								
All program areas	7,495.7	0.91	0.71	0.52	0.55	0.22	0.13	0.34
Professions	3,514.5	1.32	1.33	1.00	0.80	0.24	0.22	0.29
Business	1,286.2	2.10	2.16	1.57	1.32	0.26	0.26	0.77
Education	1,276.4	2.27	2.47	1.61	1.48	0.68	0.67	0.46
Engineering	1,246.5	3.10	3.20	1.73	1.28	0.37	0.39	0.36
Health sciences	2,463.1	2.23	2.19	1.90	1.35	0.40	0.35	0.42
Liberal arts and sciences	4,544.3	1.07	0.83	0.56	0.56	0.35	0.18	0.47
Fine arts	1,509.1	2.72	2.45	1.64	1.30	0.96	0.75	1.65
Humanities	1,692.8	1.52	1.24	0.86	0.90	0.62	0.23	0.62
Natural sciences	2,551.7	1.66	1.29	0.78	0.85	0.42	0.28	0.60
Social sciences	1,714.0	1.93	1.72	1.20	0.70	0.53	0.39	0.42
All other program areas	2,257.4	2.19	1.54	1.13	1.43	0.36	0.43	0.50

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B5.2—Standard errors for percentage distribution of full-time faculty, by tenure status, faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Number	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure for faculty status	No tenure system at institution
All faculty[1]	11,158.2	0.85	0.55	0.45	0.28	0.67
New faculty[2]	5,087.4	0.95	1.06	0.85	0.50	0.88
Senior faculty[2]	7,646.7	0.87	0.45	0.39	0.27	0.66
Gender						
New faculty						
Male	3,619.1	1.41	1.37	1.07	0.60	0.89
Female	2,330.6	1.01	1.39	1.36	0.78	1.21
Senior faculty						
Male	6,303.2	0.88	0.50	0.40	0.28	0.61
Female	2,465.1	1.35	0.79	0.74	0.47	1.06
Type and control						
New faculty						
All institutions	5,087.4	0.95	1.06	0.85	0.50	0.88
All research institutions	4,588.6	2.30	2.14	1.86	1.20	0.28
Public	4,260.3	2.77	2.32	2.02	1.42	0.11
Private	3,110.4	3.82	5.00	3.51	2.11	0.95
All other doctorate-granting institutions[3]	2,352.1	1.71	2.47	2.61	1.21	1.02
Public	1,866.7	1.85	3.01	2.73	1.39	0.00
Private	1,431.0	3.47	4.29	5.37	2.25	2.74
All comprehensive institutions	1,670.0	1.37	1.84	1.55	0.76	1.07
Public	1,426.0	1.78	2.04	1.85	0.92	0.49
Private	869.1	1.79	3.84	2.84	1.35	3.39
Private liberal arts institutions	874.4	2.29	3.60	2.45	1.09	4.41
Public 2-year institutions	1,814.8	2.04	2.55	1.01	1.16	2.80
All other institutions[4]	970.8	3.23	4.12	2.25	1.48	6.79
Senior faculty						
All institutions	7,646.7	0.87	0.45	0.39	0.27	0.66
All research institutions	7,307.7	1.58	0.85	1.05	0.65	0.72
Public	7,569.3	1.65	0.99	1.15	0.59	0.25
Private	3,808.7	3.53	1.54	2.37	1.89	3.05
All other doctorate-granting institutions[3]	4,069.7	2.19	1.63	1.17	0.90	0.50
Public	3,451.6	1.63	1.37	1.22	0.54	0.17
Private	2,156.1	5.67	4.08	2.57	2.46	1.52
All comprehensive institutions	3,279.1	1.17	0.76	0.53	0.31	0.46
Public	2,856.5	1.24	0.92	0.55	0.39	0.13
Private	1,610.4	2.72	1.31	1.24	0.50	1.62
Private liberal arts institutions	1,111.4	3.33	1.69	0.91	0.96	2.83
Public 2-year institutions	2,919.7	2.26	0.77	0.41	0.48	2.17
All other institutions[4]	1,418.1	6.23	2.18	1.75	1.29	6.98

Table B5.2—Standard errors for percentage distribution of full-time faculty, by tenure status, faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Number	Tenure status				
		Tenured	On tenure track	Not on tenure track	No tenure for faculty status	No tenure system at institution
Program area[5]						
New faculty						
All program areas	4,878.0	0.97	1.07	0.84	0.44	0.90
Professions	2,486.9	1.41	1.61	1.54	0.72	1.27
Business	846.7	2.30	3.11	2.12	1.34	2.26
Education	740.4	3.04	3.09	2.13	1.65	1.83
Engineering	924.5	4.13	4.22	2.44	1.56	2.50
Health sciences	1,930.8	2.40	2.66	3.01	1.29	1.98
Liberal arts and sciences	2,825.5	1.28	1.47	0.96	0.51	1.04
Fine arts	775.2	3.15	4.40	2.44	1.30	5.13
Humanities	945.6	1.83	2.05	1.64	1.08	1.62
Natural sciences	1,781.9	2.01	2.18	1.51	0.94	1.01
Social sciences	1,237.3	2.66	3.51	2.41	0.82	1.47
All other program areas	1,485.6	2.57	2.68	1.41	1.35	1.58
Senior faculty						
All program areas	7,495.7	0.87	0.47	0.38	0.25	0.66
Professions	3,514.5	1.33	0.87	0.90	0.35	0.94
Business	1,286.2	1.84	1.34	0.80	0.76	1.25
Education	1,276.4	1.85	1.34	1.27	0.62	0.97
Engineering	1,246.5	2.41	1.89	0.79	0.55	1.57
Health sciences	2,463.1	2.54	1.64	1.92	0.70	1.87
Liberal arts and sciences	4,544.3	1.01	0.49	0.40	0.34	0.74
Fine arts	1,509.1	3.33	1.56	1.08	0.71	3.09
Humanities	1,692.8	1.40	0.63	0.62	0.63	0.95
Natural sciences	2,551.7	1.30	0.91	0.60	0.56	0.72
Social sciences	1,714.0	1.38	0.88	0.66	0.57	0.79
All other program areas	2,257.4	1.65	1.12	0.83	0.61	1.10

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[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[5] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B5.3—Standard errors for percentage of full-time faculty satisfied with selected job dimensions, by faculty seniority, gender, and type and control of institution: Fall 1992

Faculty seniority, gender, and type and control of institution	Percentage of faculty somewhat or very satisfied with each of the following items:							
	Workload	Job security	Advancement opportunities	Keeping current in field	Freedom for outside consulting	Salary	Benefits	Spouse employment
All faculty[1]	0.51	0.47	0.58	0.57	0.46	0.77	0.74	0.53
New faculty[2]	0.90	0.84	0.88	0.87	0.75	1.13	0.94	0.84
Senior faculty[2]	0.67	0.50	0.66	0.71	0.53	0.86	0.81	0.63
Gender								
New faculty								
Male	1.27	1.16	1.14	1.17	0.99	1.46	1.23	1.30
Female	1.25	1.23	1.32	1.32	1.03	1.36	1.19	1.06
Senior faculty								
Male	0.79	0.56	0.79	0.84	0.62	0.97	0.92	0.77
Female	1.03	0.86	1.02	1.05	0.89	1.22	1.04	0.85
Type and control								
New faculty								
All institutions	0.90	0.84	0.88	0.87	0.75	1.13	0.94	0.84
All research institutions	2.16	1.79	2.05	1.77	1.76	2.76	2.24	2.02
All other doctorate-granting institutions[3]	2.14	2.04	2.12	2.02	1.82	2.32	2.08	2.01
All comprehensive institutions	1.47	1.51	1.58	1.61	1.17	1.74	1.60	1.32
Private liberal arts institutions	2.89	2.96	2.06	2.39	2.38	3.52	3.09	2.82
Public 2-year institutions	1.69	1.55	1.85	2.16	1.61	2.17	1.37	1.47
All other institutions[4]	2.89	4.43	2.97	2.83	3.05	4.46	4.71	3.19
Senior faculty								
All institutions	0.67	0.50	0.66	0.71	0.53	0.86	0.81	0.63
All research institutions	1.44	1.16	1.51	1.53	1.20	1.95	2.21	1.60
All other doctorate-granting institutions[3]	1.31	1.23	1.59	1.63	1.36	2.29	1.83	1.42
All comprehensive institutions	1.27	0.80	1.10	1.17	0.87	1.58	1.26	1.11
Private liberal arts institutions	1.86	2.07	2.06	2.53	1.64	2.72	2.52	2.07
Public 2-year institutions	1.35	0.86	1.46	1.31	0.92	1.67	1.11	1.00
All other institutions[4]	3.27	3.42	3.08	3.60	2.81	3.92	4.38	3.52

[1] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[2] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[3] Includes medical schools.

[4] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Table B5.4—Standard errors for percentage of full-time faculty satisfied with selected career dimensions, by faculty seniority, gender, type and control of institution, and program area: Fall 1992

Faculty seniority, gender, type and control of institution, and program area	Percentage of faculty who would choose an academic career again[1]	Percentage of faculty satisfied with overall job[2]
All faculty[3]	0.31	0.43
New faculty[4]	0.57	0.70
Senior faculty[4]	0.36	0.49
Gender		
New faculty		
Male	0.78	0.95
Female	0.77	1.01
Senior faculty		
Male	0.42	0.56
Female	0.65	0.84
Type and control		
New faculty		
All institutions	0.57	0.70
All research institutions	1.43	1.60
All other doctorate-granting institutions[5]	1.21	1.92
All comprehensive institutions	0.98	1.16
Private liberal arts institutions	1.72	2.37
Public 2-year institutions	1.01	1.09
All other institutions[6]	1.81	3.09
Senior faculty		
All institutions	0.36	0.49
All research institutions	0.78	1.22
All other doctorate-granting institutions[5]	0.88	1.28
All comprehensive institutions	0.59	0.82
Private liberal arts institutions	1.42	1.78
Public 2-year institutions	0.80	0.71
All other institutions[6]	1.67	2.60

Table B5.4—Standard errors for percentage of full-time faculty satisfied with selected career dimensions, by faculty seniority, gender, type and control of institution, and program area: Fall 1992, continued

Faculty seniority, gender, type and control of institution, and program area	Percentage of faculty who would choose an academic career again[1]	Percentage of faculty satisfied with overall job[2]
Program area[7]		
New faculty		
All program areas	0.58	0.71
Professions	0.92	1.20
Liberal arts and sciences	0.81	1.05
Fine arts	2.41	3.06
Humanities	1.16	1.56
Natural sciences	1.50	1.70
Social sciences	1.53	2.27
All other program areas	1.60	1.71
Senior faculty		
All Program Areas	0.37	0.50
Professions	0.71	0.85
Liberal arts and sciences	0.48	0.62
Fine arts	1.46	2.20
Humanities	0.83	1.05
Natural sciences	0.72	1.03
Social sciences	1.19	1.25
All other program areas	1.02	1.14

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[1] Percentage of faculty who somewhat or strongly agreed with the following statement: "If I had it to do over again, I would still choose an academic career."

[2] Percentage of faculty who were somewhat or very satisfied with: "My job here, overall."

[3] Includes full-time faculty who reported their principal activity during Fall 1992 was teaching, research, or selected administration activities.

[4] New full-time faculty are defined as having 7 years or less in a full-time faculty position; whereas senior faculty are those who had more than 7 years in a full-time faculty position.

[5] Includes medical schools.

[6] Includes public liberal arts, private 2-year, and other specialized institutions except medical schools.

[7] The numbers for program area differ slightly from those for other variables (i.e., type and control of institution) because some faculty did not report a principal area of teaching.

NOTE: Details may not add to total because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1993 National Study of Postsecondary Faculty, "Faculty Survey."

Appendix C: References

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Appendix D:

1993 NSOPF Faculty Questionnaire

OMB No. 1850-0608
Expiration Date: 12/93

U.S. Department of Education
Office of Educational Research and Improvement

National Center for Education Statistics

1993 NATIONAL STUDY OF POSTSECONDARY FACULTY

FACULTY QUESTIONNAIRE

All information on this form will be kept confidential and will not be disclosed or released to your institution or any other group or individual.

Co-sponsored by: National Science Foundation
National Endowment for the Humanities

Contractor: National Opinion Research Center (NORC)
University of Chicago
Mailing Address:
1525 East 55th Street
Chicago, Illinois 60615
Toll-Free Number: 1-800-733-NORC

NATIONAL STUDY OF POSTSECONDARY FACULTY

Instructions for Completing Faculty Questionnaire

Many of our questions ask about your activities during the 1992 Fall Term. By this, we mean whatever academic term was in progress on October 15, 1992.

All questions that ask about your position at "this institution" refer to your position during the 1992 Fall Term ***at the institution listed on the label on the back cover of the questionnaire.***

This questionnaire was designed to be completed by both full-time and part-time instructional faculty and staff, and non-instructional faculty, in 2- and 4-year (and above) higher education institutions of all types and sizes. Please read each question carefully and follow all instructions. Some of the questions may not appear to fit your situation precisely; if you have a response other than those listed for a particular question, write in that response.

Most questions ask you to circle a number to indicate your response. Circle the number in front of your response and not the response itself. Other questions ask you to fill in information; write in the information in the space provided.

Mailing instructions for returning the completed questionnaire are on page 26.

If you have any questions on how to proceed, please call NORC toll-free at 1-800-733-NORC.

NATIONAL STUDY OF POSTSECONDARY FACULTY:
Faculty Questionnaire

1. **During the 1992 Fall Term, did you have any instructional duties at this institution (e.g., teaching one or more courses, or advising or supervising students' academic activities)?** *(CIRCLE ONE NUMBER)*

1. Yes **(ANSWER 1A)** 2. No **(SKIP TO QUESTION 2)**

1A. **During the 1992 Fall Term, were . . .** *(CIRCLE ONE NUMBER)*

1. *all* of your instructional duties related to credit courses,
2. some of your instructional duties related to credit courses or advising or supervising academic activities for credit, or
3. *all* of your instructional duties related to *non*credit courses or advising or supervising *non*credit academic activities?

2. **What was your principal activity at this institution during the 1992 Fall Term? If you have equal responsibilities, please select one.** *(CIRCLE ONE NUMBER)*

1. Teaching
2. Research
3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
   (WRITE IN TITLE OR POSITION) ____________________
7. On sabbatical from this institution
8. Other (subsidized performer, artist-in-residence, etc.)

3. **During the 1992 Fall Term, did you have faculty status at this institution?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No, I did not have faculty status
3. No, no one has faculty status at this institution

SECTION A. NATURE OF EMPLOYMENT

4. During the 1992 Fall Term, did this institution consider you to be employed part-time or full-time? *(CIRCLE ONE NUMBER)*

1. Part-time **(ANSWER 4A)** 2. Full-time **(SKIP TO QUESTION 5)**

4A. Did you hold a part-time position at this institution during the 1992 Fall Term because . . . *(CIRCLE "1" OR "2" FOR EACH REASON)*

Yes	No	
1	2	a. you preferred working on a part-time basis?
1	2	b. a full-time position was not available?
1	2	c. you were supplementing your income from other employment?
1	2	d. you wanted to be part of an academic environment?
1	2	e. you were finishing a graduate degree?
1	2	f. of other reasons?

5. Were you chairperson of a department or division at this institution during the 1992 Fall Term? *(CIRCLE ONE NUMBER)*

1. Yes
2. No

6. In what year did you begin the job you held at this institution during the 1992 Fall Term? Include promotions in rank as part of your Fall 1992 job. *(WRITE IN YEAR)*

19 ☐☐

7. What was your tenure status at this institution during the 1992 Fall Term? *(CIRCLE ONE NUMBER)*

1. Tenured → **7A. In what year did you achieve tenure at this institution?** 19 ☐☐ . . . . . .
2. On tenure track but not tenured **(SKIP TO QUESTION 9)**
3. Not on tenure track
4. No tenure system for my faculty status
5. No tenure system at this institution

8. During the 1992 Fall Term, what was the duration of your contract or appointment at this institution? *(CIRCLE ONE NUMBER)*

1. One academic term
2. One academic/calendar year
3. A limited number of years (i.e., two or more academic/calendar years)
4. Unspecified duration
5. Other

9. **Which of the following best describes your academic rank, title, or position at this institution during the 1992 Fall Term?** *(CIRCLE ONE NUMBER, OR "NA")*

NA. Not applicable: no ranks designated at this institution **(SKIP TO QUESTION 11)**

1. Professor
2. Associate Professor
3. Assistant Professor
4. Instructor
5. Lecturer
6. Other *(WRITE IN)*______________________________

10. **In what year did you first achieve this rank?**
(WRITE IN YEAR)

19☐☐

11. **During the 1992 Fall Term, which of the following kinds of appointments did you hold at this institution?** *(CIRCLE ALL THAT APPLY)*

1. Acting
2. Affiliate or adjunct
3. Visiting
4. Assigned by religious order
5. Clinical
   (WRITE IN TITLE OR POSITION) ______________________________
6. Research
   (WRITE IN TITLE OR POSITION) ______________________________
7. None of the above

12. **What is your principal field or discipline of teaching?** *(REFER TO THE LIST OF MAJOR FIELDS OF STUDY ON PAGES 5 AND 6 AND ENTER THE APPROPRIATE CODE NUMBER AND NAME BELOW. IF YOU HAVE NO FIELD OF TEACHING, CIRCLE "NA")*

NA. Not Applicable
CODE FOR FIELD
OR DISCIPLINE: ____________ ________________________________
NAME OF PRINCIPAL FIELD/DISCIPLINE

13. **What is your principal area of research? If equal areas, select one.** *(IF YOU HAVE NO RESEARCH AREA, CIRCLE "NA")*

NA. Not Applicable
CODE FOR FIELD
OR DISCIPLINE: ____________ ________________________________
NAME OF PRINCIPAL FIELD/DISCIPLINE

CODES FOR MAJOR FIELDS OF STUDY AND ACADEMIC DISCIPLINES

AGRICULTURE
101 Agribusiness & Agricultural Production
102 Agricultural, Animal, Food, & Plant Sciences
103 Renewable Natural Resources, including Conservation, Fishing, & Forestry
110 Other Agriculture

ARCHITECTURE & ENVIRONMENTAL DESIGN
121 Architecture & Environmental Design
122 City, Community, & Regional Planning
123 Interior Design
124 Land Use Management & Reclamation
130 Other Arch. & Environmental Design

ART
141 Art History & Appreciation
142 Crafts
143 Dance
144 Design (other than Arch. or Interior)
145 Dramatic Arts
146 Film Arts
147 Fine Arts
148 Music
149 Music History & Appreciation
150 Other Visual & Performing Arts

BUSINESS
161 Accounting
162 Banking & Finance
163 Business Administration & Management
164 Business Administrative Support (e.g., Bookkeeping, Office Management, Secretarial)
165 Human Resources Development
166 Organizational Behavior
167 Marketing & Distribution
170 Other Business

COMMUNICATIONS
181 Advertising
182 Broadcasting & Journalism
183 Communications Research
184 Communication Technologies
190 Other Communications

COMPUTER SCIENCE
201 Computer & Information Sciences
202 Computer Programming
203 Data Processing
204 Systems Analysis
210 Other Computer Science

EDUCATION
221 Education, General
222 Basic Skills
223 Bilingual/Cross-cultural Education
224 Curriculum & Instruction
225 Education Administration
226 Education Evaluation & Research
227 Educational Psychology
228 Special Education
229 Student Counseling & Personnel Svcs.
230 Other Education

TEACHER EDUCATION
241 Pre-Elementary
242 Elementary
243 Secondary
244 Adult & Continuing
245 Other General Teacher Ed. Programs
250 Teacher Education in Specific Subjects

ENGINEERING
261 Engineering, General
262 Civil Engineering
263 Electrical, Electronics, & Communication Engineering
264 Mechanical Engineering
265 Chemical Engineering
270 Other Engineering
280 Engineering-Related Technologies

ENGLISH AND LITERATURE
291 English, General
292 Composition & Creative Writing
293 American Literature
294 English Literature
295 Linguistics
296 Speech, Debate, & Forensics
297 English as a Second Language
300 English, Other

FOREIGN LANGUAGES

311 Chinese (Mandarin, Cantonese, or Other Chinese)
312 French
313 German
314 Italian
315 Latin
316 Japanese
317 Other Asian
318 Russian or Other Slavic
319 Spanish
320 Other Foreign Languages

HEALTH SCIENCES

331 Allied Health Technologies & Services
332 Dentistry
333 Health Services Administration
334 Medicine, including Psychiatry
335 Nursing
336 Pharmacy
337 Public Health
338 Veterinary Medicine
340 Other Health Sciences

350 HOME ECONOMICS

360 INDUSTRIAL ARTS

370 LAW

380 LIBRARY & ARCHIVAL SCIENCES

NATURAL SCIENCES: BIOLOGICAL SCIENCES

391 Biochemistry
392 Biology
393 Botany
394 Genetics
395 Immunology
396 Microbiology
397 Physiology
398 Zoology
400 Biological Sciences, Other

NATURAL SCIENCES: PHYSICAL SCIENCES

411 Astronomy
412 Chemistry
413 Physics
414 Earth, Atmosphere, and Oceanographic (Geological Sciences)
420 Physical Sciences, Other

430 MATHEMATICS

440 STATISTICS

450 MILITARY STUDIES

460 MULTI/INTERDISCIPLINARY STUDIES

470 PARKS & RECREATION

480 PHILOSOPHY AND RELIGION

490 THEOLOGY

500 PROTECTIVE SERVICES (e.g., Criminal Justice, Fire Protection)

510 PSYCHOLOGY

520 PUBLIC AFFAIRS (e.g., Community Services, Public Administration, Public Works, Social Work)

530 SCIENCE TECHNOLOGIES

SOCIAL SCIENCES AND HISTORY

541 Social Sciences, General
542 Anthropology
543 Archeology
544 Area & Ethnic Studies
545 Demography
546 Economics
547 Geography
548 History
549 International Relations
550 Political Science & Government
551 Sociology
560 Other Social Sciences

VOCATIONAL TRAINING

CONSTRUCTION TRADES

601 Carpentry
602 Electrician
603 Plumbing
610 Other Construction Trades

CONSUMER, PERSONAL, & MISC. SERVICES

621 Personal Services (e.g., Barbering, Cosmetology)
630 Other Consumer Services

MECHANICS AND REPAIRERS

641 Electrical & Electronics Equipment Repair
642 Heating, Air Conditioning, & Refrigeration Mechanics & Repairers
643 Vehicle & Mobile Equipment Mechanics & Repairers
644 Other Mechanics & Repairers

PRECISION PRODUCTION

661 Drafting
662 Graphic & Print Communications
663 Leatherworking & Upholstering
664 Precision Metal Work
665 Woodworking
670 Other Precision Production Work

TRANSPORTATION AND MATERIAL MOVING

681 Air Transportation (e.g., Piloting, Traffic Control, Flight Attendance, Aviation Management)
682 Land Vehicle & Equipment Operation
683 Water Transportation (e.g., Boat & Fishing Operations, Deep Water Diving, Marina Operations, Sailors & Deckhands)
690 Other Transportation & Material Moving

900 OTHER *(IF YOU USE THIS CODE, BE SURE TO WRITE IN A COMPLETE DESCRIPTION AT QUESTIONS 12-13, AND 16)*

SECTION B. ACADEMIC/PROFESSIONAL BACKGROUND

14. **Which of the following undergraduate academic honors or awards, if any, did you receive?**
(CIRCLE ALL THAT APPLY)

1. National academic honor society, such as Phi Beta Kappa, Tau Beta Pi, or other field-specific national honor society
2. Cum laude or honors
3. Magna cum laude or high honors
4. Summa cum laude or highest honors
5. Other undergraduate academic achievement award
6. None of the above

15. **When you were in graduate school, which of the following forms of financial assistance, if any, did you receive?**
(CIRCLE ALL THAT APPLY, OR CIRCLE "NA")

NA. Not applicable; did not attend graduate school **(GO TO QUESTION 16)**

1. Teaching assistantship
2. Research assistantship
3. Program or residence hall assistantship
4. Fellowship
5. Scholarship or traineeship
6. Grant
7. G.I. Bill or other veterans' financial aid
8. Federal or state loan
9. Other loan
10. None of the above

16. **Please list below the degrees or other formal awards that you hold, the year you received each one, the field code (from pages 5-6) that applies, name of the field, and the name and location of the institution from which you received each degree or award. Do not list honorary degrees.** *(COMPLETE ALL COLUMNS FOR EACH DEGREE)*

CODES FOR TYPE OF DEGREE

1 Professional degree (M.D., D.D.S., L.L.B., etc.)
2 Doctoral degree (Ph.D., Ed.D., etc.)
3 Master's degree or equivalent
4 Bachelor's degree or equivalent
5 Certificate, diploma, or degree for completion of undergraduate program of more than 2 years but less than 4 years in length
6 Associate's degree or equivalent
7 Certificate, diploma, or degree for completion of undergraduate program of at least 1 year but less than 2 years in length

	A. Degree Code (see above)	**B. Year Received**	**C. Field Code (from pp. 5-6)**	**D. Name of Field (from pp. 5-6)**	**E. Name of Institution (a) and City and State/Country of Institution (b)**
(1) Highest	______	19______	________	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________
(2) Next Highest	______	19______	________	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________
(3) Next Highest	______	19______	________	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________
(4) Next Highest	______	19______	________	____________________ ____________________	a. ____________________ ____________________ b. ____________________ ____________________

17. **During the 1992 Fall Term, were you employed only at this institution, or did you also have other employment including any outside consulting or other self-owned business, or private practice?** *(CIRCLE ONE NUMBER)*

1. Employed only at this institution **(SKIP TO QUESTION 19)**
2. Had other employment, consulting, self-owned business, or private practice

17A. **How many different jobs, other than your employment at this institution, did you have during the 1992 Fall Term? Include all outside consulting, self-owned business, and private practice.** *(WRITE IN NUMBER)*

_____________ Number of Jobs

18. **Not counting any employment at this institution, what was the employment sector of the main other job you held during Fall 1992?** *(CIRCLE ONE NUMBER)*

1. 4-year college or university, graduate or professional school
2. 2-year or other postsecondary institution
3. Elementary or secondary school
4. Consulting, freelance work, self-owned business, or private practice
5. Hospital or other health care or clinical setting
6. Foundation or other nonprofit organization other than health care organization
7. For-profit business or industry in the private sector
8. Federal government, including military, or state or local government
9. Other *(WRITE IN)* ____

18A. **What year did you begin that job?** *(WRITE IN YEAR)*

19 ☐☐

18B. **What was your primary responsibility in that job?** *(CIRCLE ONE NUMBER)*

1. Teaching
2. Research
3. Technical activities (e.g., programmer, technician, chemist, engineer, etc.)
4. Clinical service
5. Community/public service
6. Administration
7. Other

18C. **Was that job full-time or part-time?** *(CIRCLE ONE NUMBER)*

1. Full-time
2. Part-time

19 The next questions ask about jobs that ended before the beginning of the 1992 Fall Term. For the three most recent and significant main jobs that you held during the past 15 years, indicate below the year you began and the year you left each job, the employment sector, your primary responsibility, and whether you were employed full-time or part-time.

- **Do not list promotions in rank at one place of employment as different jobs.**
- **Do not include temporary positions (i.e., summer positions) or work as a graduate student.**
- **List each job (other than promotion in rank) separately.**

If not applicable, circle "NA" ······>	**NA**	**NA**	**NA**
	A.	**B.**	**C.**
(i) **YEARS JOB HELD**	**MOST RECENT MAIN JOB (PRIOR TO FALL 1992)**	**NEXT MOST RECENT MAIN JOB**	**NEXT MOST RECENT MAIN JOB**
FROM:	19______	19______	19______
TO:	19______	19______	19______
(2) EMPLOYMENT SECTOR	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
4-year college or university, graduate or professional school	1	1	1
2-year or other postsecondary institution	2	2	2
Elementary or secondary school	3	3	3
Consulting, freelance work, self-owned business, or private practice	4	4	4
Hospital or other health care or clinical setting	5	5	5
Foundation or other nonprofit organization other than health care organization	6	6	6
For-profit business or industry in the private sector	7	7	7
Federal government, including military, or state or local government	8	8	8
Other	9	9	9
(3) PRIMARY RESPONSIBILITY	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Teaching	1	1	1
Research	2	2	2
Technical activities (e.g., programmer, technician, chemist, engineer, etc.)	3	3	3
Clinical service	4	4	4
Community/public service	5	5	5
Administration	6	6	6
Other	7	7	7
(4) FULL-TIME/PART-TIME	*(CIRCLE ONE)*	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Full-time	1	1	1
Part-time	2	2	2

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20 **About how many of each of the following have you presented/published/etc. during your entire career and during the last 2 years? For publications, please include only works that have been accepted for publication. Count multiple presentations/publications of the same work only once.** *(CIRCLE "NA" IF YOU HAVE NOT PUBLISHED OR PRESENTED)*

NA. No presentations/publications/etc. **(GO TO QUESTION 21)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Presentation/Publication/etc.	**A. Total during career**	**B. Number in past 2 years**
(1) Articles published in refereed professional or trade journals	______	______
(2) Articles published in nonrefereed professional or trade journals	______	______
(3) Creative works published in juried media	______	______
(4) Creative works published in nonjuried media or in-house newsletters	______	______
(5) Published reviews of books, articles, or creative works	______	______
(6) Chapters in edited volumes	______	______
(7) Textbooks	______	______
(8) Other books	______	______
(9) Monographs	______	______
(10) Research or technical reports disseminated internally or to clients	______	______
(11) Presentations at conferences, workshops, etc.	______	______
(12) Exhibitions or performances in the fine or applied arts	______	______
(13) Patents or copyrights (excluding thesis or dissertation)	______	______
(14) Computer software products	______	______

SECTION C. INSTITUTIONAL RESPONSIBILITIES AND WORKLOAD

21 **During the 1992 Fall Term, how many undergraduate or graduate thesis or dissertation committees, comprehensive exams, orals committees, or examination or certification committees did you chair and/or serve on at this institution?** *(CIRCLE "NA" IF YOU DID NOT SERVE ON ANY COMMITTEES)*

NA. Did not serve on any undergraduate or graduate committees **(GO TO QUESTION 22)**

(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")

Type of Committee	**A. Number served on**	**B. Of that number, how many did you chair?**
(1) Undergraduate thesis or dissertation committees	______	______
(2) Undergraduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	______	______
(3) Undergraduate examination/certification committees	______	______
(4) Graduate thesis or dissertation committees	______	______
(5) Graduate comprehensive exams or orals committees (other than as part of thesis/dissertation committees)	______	______
(6) Graduate examination/certification committees	______	______

22 **During the 1992 Fall Term, what was the total number of classes or sections you taught at this institution? Do not include individualized instruction, such as independent study or individual performance classes. Count multiple sections of the same course as a separate class, but not the lab section of a course.**
(WRITE IN A NUMBER, OR CIRCLE "0")

0. No classes taught **(SKIP TO QUESTION 25)**

______ Number of classes/sections **(ANSWER 22A)**

22A. How many of those classes were classes for credit?

0. No classes for credit **(SKIP TO QUESTION 25)**

______ Number of classes/sections for credit **(ANSWER QUESTION 23 ON THE NEXT PAGE)**

23 **For each class or section that you taught for credit at this institution during the 1992 Fall Term, please answer the following items. Do not include individualized instruction, such as independent study or individual one-on-one performance classes.**
If you taught multiple sections of the same course, count them as separate classes, but do not include the lab section of the course as a separate class. For each class, enter the code for the academic discipline of the class. (Refer to pages 5-6 for the codes. Please enter the code rather than the course name.)

	A.	B.
	FIRST FOR-CREDIT CLASS	**SECOND FOR-CREDIT CLASS**
(1) **CODE FOR ACADEMIC DISCIPLINE OF CLASS (from pp. 5-6)**	☐	☐
(2) **DURING 1992 FALL TERM**		
Number of weeks the class met?	a. ______	a. ______
Number of credit hours?	b. ______	b. ______
Number of hours the class met per week?	c. ______	c. ______
Number of teaching assistants, readers?	d. ______	d. ______
Number of students enrolled?	e. ______	e. ______
Was this class team taught?	f. 1. Yes 2. No	f. 1. Yes 2. No
Average # hours per week *you* taught the class?	g. ______	g. ______
(3) **PRIMARY LEVEL OF STUDENTS**	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lower division students (first or second year postsecondary) or	1	1
Upper division students (third or fourth year postsecondary) or	2	2
Graduate or any other post-baccalaureate students, or	3	3
All other students?	4	4
(4) **PRIMARY INSTRUCTIONAL METHOD USED**	*(CIRCLE ONE)*	*(CIRCLE ONE)*
Lecture	1	1
Seminar	2	2
Discussion group or class presentations	3	3
Lab, clinic or problem session	4	4
Apprenticeship, internship, field work, or field trips	5	5
Role playing, simulation, or other performance (e.g., art, music, drama)	6	6
TV or radio	7	7
Group projects	8	8
Cooperative learning groups	9	9

C.	D.	E.	
THIRD FOR-CREDIT CLASS	**FOURTH FOR-CREDIT CLASS**	**FIFTH FOR-CREDIT CLASS**	
a. ________	a. ________	a. ________	a. Number of weeks the class met
b. ________	b. ________	b. ________	b. Number of credit hours
c. ________	c. ________	c. ________	c. Number of hours the class met per week
d. ________	d. ________	d. ________	d. Number of teaching assistants, readers
e. ________	e. ________	e. ________	e. Number of students enrolled
f. 1. Yes 2. No	f. 1. Yes 2. No	f. 1. Yes 2. No	f. Was this class team taught
g. ________	g. ________	g. ________	g. Average # hours per week *you* taught
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	Lower division students
2	2	2	Upper division students
3	3	3	Graduate, post-baccalaureate students
4	4	4	All other students
(CIRCLE ONE)	*(CIRCLE ONE)*	*(CIRCLE ONE)*	
1	1	1	Lecture
2	2	2	Seminar
3	3	3	Discussion group or class presentations
4	4	4	Lab, clinic or problem session
5	5	5	Apprenticeship, internship, etc.
6	6	6	Role playing, simulation, performance, etc.
7	7	7	TV or radio
8	8	8	Group projects
9	9	9	Cooperative learning groups

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24 **Did you teach any undergraduate courses for credit during the 1992 Fall Term at this institution?**

1. Yes **(ANSWER 24A)** 2. No **(SKIP TO QUESTION 25)**

24A. In how many of the undergraduate courses that you taught for credit during the 1992 Fall Term did you use . . . *(CIRCLE ONE NUMBER FOR EACH ITEM)*

None	**Some**	**All**		
1	2	3	a.	Computational tools or software?
1	2	3	b.	Computer-aided or machine-aided instruction?
1	2	3	c.	Student presentations?
1	2	3	d.	Student evaluations of each other's work?
1	2	3	e.	Multiple-choice midterm and/or final exam?
1	2	3	f.	Essay midterm and/or final exams?
1	2	3	g.	Short-answer midterm and/or final exams?
1	2	3	h.	Term/research papers?
1	2	3	i.	Multiple drafts of written work?
1	2	3	j.	Grading on a curve?
1	2	3	k.	Competency-based grading?

25 **For each type of student listed below, please indicate how many students received individual instruction from you during the 1992 Fall Term, (e.g., independent study or one-on-one instruction, including working with individual students in a clinical or research setting), and the total number of contact hours with these students per week. Do not count regularly scheduled office hours.** *(WRITE IN A NUMBER ON EACH LINE; IF NONE, WRITE IN "0")*

Type of students receiving Formal Individualized Instruction	**A. Number of students**	**B. Total contact hours per week**
(1) Lower division students (first or second year postsecondary)	________	________
(2) Upper division students (third or fourth year postsecondary)	________	________
(3) Graduate or any other post-baccalaureate students	________	________
(4) All other students	________	________

26 **During the 1992 Fall Term, how many regularly scheduled office hours did you have per week?** *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

__________ Number of hours per week

27 **During the 1992 Fall Term, how much informal contact with students did you have each week outside of the classroom? Do not count individual instruction, independent study, etc., or regularly scheduled office hours.** *(WRITE IN A NUMBER; IF NONE, WRITE IN "0")*

__________ Number of hours per week

28 **During the 1992 Fall Term, were you engaged in any professional research, writing, or creative works?**

1. Yes **(ANSWER QUESTION 29)** 2. No **(SKIP TO QUESTION 34)**

29 **How would you describe your primary professional research, writing, or creative work during the 1992 Fall Term?** *(CIRCLE ONE NUMBER)*

1. Pure or basic research
2. Applied research
3. Policy-oriented research or analysis
4. Literary or expressive
5. Program/Curriculum design and development
6. Other

30 **During the 1992 Fall Term, were you engaged in any funded research or funded creative endeavors? Include any grants, contracts, or institutional awards. Do not include consulting services.** *(CIRCLE ONE NUMBER)*

1. Yes
2. No **(SKIP TO QUESTION 34)**

31 **During the 1992 Fall Term, were you a principal investigator (PI) or co-principal investigator (Co-PI) for any grants or contracts?** *(CIRCLE ONE NUMBER)*

1. Yes
2. No **(SKIP TO QUESTION 34)**

32 **During the 1992 Fall Term, how many individuals other than yourself were supported by all the grants and contracts for which you were PI or Co-PI?** *(WRITE IN NUMBER; IF NONE, WRITE IN "0")*

_______ Number of individuals

33 **Fill out the information below for each funding source during the 1992 Fall Term. If not sure, give your best estimate.**

A. **Funding source** *(CIRCLE "1" OR "2" FOR EACH SOURCE)*		**B.** **Number of Grants/ Contracts**	**C.** **Work done as...** *(CIRCLE ALL THAT APPLY)*	**D.** **Total funds for 1992-93 academic year**	**E.** **How funds were used** *(CIRCLE ALL THAT APPLY)*
(1) This institution?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(2) Foundation or other nonprofit organization?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(3) For profit business or industry in the private sector?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(4) State or local government?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(5) Federal Government?	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other
(6) Other source? *(WRITE IN)* ______________	1. Yes → 2. No	______	1. PI 2. Co-PI 3. Staff	$ __________	1. Research 2. Program/curriculum development 3. Other

34 **How would you rate each of the following facilities or resources at this institution that were available for your own use during the 1992 Fall Term?** *(CIRCLE ONE NUMBER, OR "NA," ON EACH LINE)*

Not Available/ Not Applicable	Very Poor	Poor	Good	Very Good		
NA	1	2	3	4	a.	Basic research equipment/instruments
NA	1	2	3	4	b.	Laboratory space and supplies
NA	1	2	3	4	c.	Availability of research assistants
NA	1	2	3	4	d.	Personal computers
MA	1	2	3	4	e.	Centralized (main frame) computer facilities
NA	1	2	3	4	f.	Computer networks with other institutions
NA	1	2	3	4	g.	Audio-visual equipment
NA	1	2	3	4	h.	Classroom space
NA	1	2	3	4	i.	Office space
NA	1	2	3	4	j.	Studio/performance space
NA	1	2	3	4	k.	Secretarial support
NA	1	2	3	4	l.	Library holdings

35 **Listed below are some ways that institutions and departments may use internal funds for the professional development of faculty.**

A. **Was institutional or department funding available for your use during the past two years for . . .**		**B.** **Did you use any of those funds at this institution?**	**C.** **Were those funds adequate for your purposes?**
(1) tuition remission at this or other institutions?	1. Yes ••••••▸ 2. No DK. Don't know	1. Yes •••••••••••▸ 2. No	1. Yes 2. No
(2) professional association memberships and/or registration fees?	1. Yes ••••••▸ 2. No DK. Don't know	1. Yes •••••••••••▸ 2. No	1. Yes 2. No
(3) professional travel?	1. Yes ••••••▸ 2. No DK. Don't know	1. Yes •••••••••••▸ 2. No	1. Yes 2. No
(4) training to improve research or teaching skills?	1. Yes ••••••▸ 2. No DK. Don't know	1. Yes •••••••••••▸ 2. No	1. Yes 2. No
(5) retraining for fields in higher demand?	1. Yes ••••••▸ 2. No DK. Don't know	1. Yes •••••••••••▸ 2. No	1. Yes 2. No
(6) sabbatical leave?	1. Yes ••••••▸ 2. No DK. Don't know	1. Yes •••••••••••▸ 2. No	1. Yes 2. No

36 **On the average, how many hours per week did you spend at each of the following kinds of activities during the 1992 Fall Term?** *(IF NOT SURE, GIVE YOUR BEST ESTIMATES)*

Average number hours per week
during the 1992 Fall Term

______________ a. All paid activities at this institution (teaching, research, administration, etc.)

______________ b. All unpaid activities at this institution

______________ c. Any other paid activities outside this institution (e.g., consulting, working on other jobs)

______________ d. Unpaid (pro bono) professional service activities outside this institution

37 **In column A, we ask you to allocate your total work time in the Fall of 1992 (as reported in Question 36) into several categories. We realize that they are not mutually exclusive categories (e.g., research may include teaching; preparing a course may be part of professional growth). We ask, however, that you allocate as best you can the proportion of your time spent in activities whose primary focus falls within the indicated categories. In column B, indicate what percentage of your time you would prefer to spend in each of the listed categories.**

A. **% of Work Time Spent**	*(WRITE IN A PERCENTAGE ON EACH LINE.* *IF NOT SURE, GIVE YOUR BEST ESTIMATE; IF NONE, WRITE IN "0*	**B.** **% of Work Time Preferred**
______%	a. **Teaching** (including teaching, grading papers, preparing courses; developing new curricula; advising or supervising students; working with student organizations or intramural athletics)	______%
______%	b. **Research/Scholarship** (including research; reviewing or preparing articles or books; attending or preparing for professional meetings or conferences; reviewing proposals; seeking outside funding; giving performances or exhibitions in the fine or applied arts, or giving speeches)	______%
______%	c. **Professional Growth** (including taking courses, pursuing an advanced degree; other professional development activities, such as practice or activities to remain current in your field)	______%
______%	d. **Administration**	______%
______%	e. **Outside Consulting or Freelance Work**	______%
______%	f. **Service/Other Non-Teaching Activities** (including providing legal or medical services or psychological counseling to clients or patients; paid or unpaid community or public service, service to professional societies/associations; other activities or work not listed in a-e)	______%
100%	PLEASE BE SURE THAT THE PERCENTAGES YOU PROVIDE ADD UP TO 100% OF THE TOTAL TIME.	100%

38 **Are you a member of the union (or other bargaining association) that represents faculty at this institution?**

1. Union is available, but I am not eligible
2. I am eligible, but not a member
3. I am eligible, and a member
4. Union is not available at this institution

SECTION D. JOB SATISFACTION ISSUES

39 **How satisfied or dissatisfied are you with each of the following aspects of your instructional duties at this institution?** *(CIRCLE "NA" IF YOU HAD NO INSTRUCTIONAL DUTIES)*

NA. No instructional duties **(GO TO QUESTION 40)**

(CIRCLE ONE NUMBER FOR EACH ITEM; IF AN ITEM DOES NOT APPLY TO YOU, WRITE IN "NA" NEXT TO THE ITEM)

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. The authority I have to make decisions about content and methods in the courses I teach
1	2	3	4	b. The authority I have to make decisions about other (non-instructional) aspects of my job
1	2	3	4	c. The authority I have to make decisions about what courses I teach
1	2	3	4	d. Time available for working with students as an advisor, mentor, etc.
1	2	3	4	e. Quality of undergraduate students whom I have taught here
1	2	3	4	f. Quality of graduate students whom I have taught here

40. **How satisfied or dissatisfied are you with the following aspects of your job at this institution?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Very Dissatisfied	Somewhat Dissatisfied	Somewhat Satisfied	Very Satisfied	
1	2	3	4	a. My work load
1	2	3	4	b. My job security
1	2	3	4	c. Opportunity for advancement in rank at this institution
1	2	3	4	d. Time available for keeping current in my field
1	2	3	4	e. Freedom to do outside consulting
1	2	3	4	f. My salary
1	2	3	4	g. My benefits, generally
1	2	3	4	h. Spouse or partner employment opportunities in this geographic area
1	2	3	4	i. My job here, overall

41. **During the next three years, how likely is it that you will leave this job to . . .**
(CIRCLE ONE NUMBER FOR EACH ITEM)

Not At All Likely	Somewhat Likely	Very Likely		
1	2	3	a.	accept a part-time job at a different postsecondary institution?
1	2	3	b.	accept a full-time job at a different postsecondary institution?
1	2	3	c.	accept a part-time job not at a postsecondary institution?
1	2	3	d.	accept a full-time job not at a postsecondary institution?
1	2	3	e.	retire from the labor force?

42. **At what age do you think you are most likely to stop working at a postsecondary institution?**
(WRITE IN AGE, OR CIRCLE "DK")

__________ Years of age

DK. Don't know

43. **If you were to leave your current position in academia to accept another position inside or outside of academia, how important would each of the following be in your decision?** *(CIRCLE ONE NUMBER FOR EACH ITEM)*

Not Important	Somewhat Important	Very Important		
1	2	3	a.	Salary level
1	2	3	b.	Tenure-track/tenured position
1	2	3	c.	Job security
1	2	3	d.	Opportunities for advancement
1	2	3	e.	Benefits
1	2	3	f.	No pressure to publish
1	2	3	g.	Good research facilities and equipment
1	2	3	h.	Good instructional facilities and equipment
1	2	3	i.	Good job or job opportunities for my spouse or partner
1	2	3	j.	Good geographic location
1	2	3	k.	Good environment/schools for my children
1	2	3	l.	Greater opportunity to teach
1	2	3	m.	Greater opportunity to do research
1	2	3	n.	Greater opportunity for administrative responsibilities

44. **If you could elect to draw on your retirement and still continue working at your institution on a part-time basis, would you do so?** *(CIRCLE ONE)*

1. Yes

2. No

DK. Don't know

45. **If an early retirement option were offered to you at your institution, would you take it?** *(CIRCLE ONE)*

1. Yes

2. No

DK. Don't know

46. **At which age do you think you are most likely to retire from all paid employment?** *(WRITE IN AGE, OR CIRCLE "DK")*

__________ Years of age

DK. Don't know

SECTION E. COMPENSATION

***Note:** Your responses to these items as with all other items in this questionnaire are voluntary and strictly confidential. They will be used only in statistical summaries, and will not be disclosed to your institution or to any individual or group. Furthermore, all information that would permit identification of individuals or institutions will be removed from the survey files.*

47. For the calendar year 1992, estimate your gross compensation before taxes from each of the sources listed below.

(IF NOT SURE, GIVE YOUR BEST ESTIMATES; IF NO COMPENSATION FROM A SOURCE, WRITE IN "0")

Compensation from this institution:

$ ____________ a. Basic salary ••▸ b. **Type of appointment (e.g., 9 months)** ☐ # of months

$ ____________ c. Other teaching at this institution not included in basic salary (e.g., for summer session)

$ ____________ d. Supplements not included in basic salary (for administration, research, coaching sports, etc.)

$ ____________ e. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

$ ____________ f. Any other income from this institution

Compensation from other sources:

$ ____________ g. Employment at another academic institution

$ ____________ h. Legal or medical services or psychological counseling

$ ____________ i. Outside consulting, consulting business or freelance work

$ ____________ j. Self-owned business (other than consulting)

$ ____________ k. Professional performances or exhibitions

$ ____________ l. Speaking fees, honoraria

$ ____________ m. Royalties or commissions

$ ____________ n. Any other employment

$ ____________ o. Non-monetary compensation, such as food, housing, car (Do not include employee benefits such as medical, dental, or life insurance)

Other sources of earned income *(WRITE IN BELOW):*

$ ____________ p. ____

$ ____________ q. ____

48. For the calendar year 1992, how many persons were in your household including yourself?

________ Total number in household

49. For the calendar year 1992, what was your total household income?

$ ____________ Total household income

50. For the calendar year 1992, how many dependents did you have? Do not include yourself. (A dependent is someone receiving at least half of his or her support from you.)

________ Number of dependents

SECTION F. SOCIODEMOGRAPHIC CHARACTERISTICS

51. Are you . . .

1. male, or
2. female?

52. In what month and year were you born?
(WRITE IN MONTH AND YEAR)

☐☐ 19☐☐

MONTH YEAR

53. What is your race? ***(CIRCLE ONE NUMBER)***

1. American Indian or Alaskan Native
2. Asian or Pacific Islander **(ANSWER 53A)**
3. African American/Black
4. White
5. Other ***(WRITE IN BELOW)***

____

54. Are you of Hispanic descent?
(CIRCLE ONE NUMBER)

1. Yes **(ANSWER 54A)**
2. No **(SKIP TO QUESTION 55)**

54A. What is your Spanish/Hispanic origin? If more than one, circle the one you consider the most important part of your background.

1. Mexican, Mexican-American, Chicano
2. Cuban, Cubano
3. Puerto Rican, Puertorriqueno, or Bouricuan
4. Other ***(WRITE IN BELOW)***

____

55. What is your current marital status?
(CIRCLE ONE NUMBER)

1. Single, never married
2. Married
3. Living with someone in a marriage-like relationship
4. Separated
5. Divorced
6. Widowed

53A. What is your Asian or Pacific Islander origin? If more than one, circle the one you consider the most important part of your background. ***(CIRCLE ONE NUMBER)***

1. Chinese
2. Filipino
3. Japanese
4. Korean
5. Southeast Asian (Vietnamese, Laotian, Cambodian/Kampuchean, etc.)
6. Pacific Islander
7. Other ***(WRITE IN BELOW)***

____

(SKIP TO QUESTION 55)

56. **In what country were you born?**
(CIRCLE ONE NUMBER)

1. USA
2. Other *(WRITE IN)*____

57. **What is your citizenship status?**
(CIRCLE ONE NUMBER)

1. United States citizen, native
2. United States citizen, naturalized
3. Permanent resident of the United States (immigrant visa)

____
COUNTRY OF PRESENT CITIZENSHIP

4. Temporary resident of United States (non-immigrant visa)

____
COUNTRY OF PRESENT CITIZENSHIP

58. **What is the highest level of formal education completed by your mother and your father?**
(CIRCLE ONE FOR EACH PERSON)

A. **Mother**	**B.** **Father**		
1	1	a.	Less than high school diploma
2	2	b.	High school diploma
3	3	c.	Some college
4	4	d.	Associate's degree
5	5	e.	Bachelor's degree
6	6	f.	Master's degree
7	7	g.	Doctorate or professional degree (e.g., Ph.D., M.D., D.V.M., J.D./L.L.B.)
8	8	h.	Other
DK	DK	i.	Don't know

59. **Please indicate the extent to which you agree or disagree with each of the following statements.** *(CIRCLE ONE NUMBER FOR EACH STATEMENT)*

Disagree Strongly	Disagree Somewhat	Agree Somewhat	Agree Strongly	
1	2	3	4	a. Teaching effectiveness should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	b. Research/publications should be the primary criterion for promotion of college teachers at this institution.
1	2	3	4	c. At this institution, research is rewarded more than teaching.
1	2	3	4	d. State or federally mandated assessment requirements will improve the quality of undergraduate education.
1	2	3	4	e. Female faculty members are treated fairly at this institution.
1	2	3	4	f. Faculty who are members of racial or ethnic minorities are treated fairly at this institution.
1	2	3	4	g. If I had it to do over again, I would still choose an academic career.

60. **Please indicate your opinion regarding whether each of the following has worsened, stayed the same, or improved in recent years at this institution.** *(CIRCLE ONE FOR EACH ITEM)*

Worsened	Stayed the Same	Improved	Don't Know	
1	2	3	DK	a. The quality of students who choose to pursue academic careers in my field
1	2	3	DK	b. The opportunities junior faculty have for advancement in my field
1	2	3	DK	c. The professional competence of individuals entering my academic field
1	2	3	DK	d. The ability of this institution to meet the educational needs of entering students
1	2	3	DK	e. The ability of faculty to obtain external funding
1	2	3	DK	f. Pressure to increase faculty workload at this institution
1	2	3	DK	g. The quality of undergraduate education at this institution
1	2	3	DK	h. The atmosphere for free expression of ideas
1	2	3	DK	i. The quality of research at this institution

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Return this completed questionnaire in the enclosed prepaid envelope to:

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